

# STIC Search Repol

## STIC Database Tracking Number 124545

TO: Samuel Gilbert Location: cp2 4d25

Art Unit: 3736

Wednesday, June 16, 2004

Case Serial Number: 10/662960

From: Emory Damron Location: EIC 3700

CP2-2C08

Phone: 305-8587

Emory.Damron@uspto.gov

### Search Notes

Dear Samuel,

Please find below an inventor search in the bibliographic and full-text foreign patent files, as well as keyword searches in the patent and non-patent literature files, both bibliographic and full text.

References of potential pertinence have been tagged, but please review all the packets in case you like something I didn't.

In addition to searching on Dialog, I also searched Google.com, and EPO/JPO/Derwent.

I included many internet printouts because there is much out there about this type of therapy, and specifically of the "neuromodulation" variety as espoused by Leslie Feinberg, the inventor here (who is also a chiropractor). I archive-dated them when possible.

Please contact me if I can refocus or expand any aspect of this case, and please take a moment to provide any feedback (on the form provided) so EIC 3700 may better serve your needs.

Sincerely,

Emory Damron

**Technical Information Specialist** 

EIC 3700, US Patent & Trademark Office

Phone: (703) 305-8587/ Fax: (703) 306-5915

Emory.damron@uspto.gov



Access DB# 124545

## **SEARCH REQUEST FORM**

Scientific and Technical Information Center

Requester's Full Name: Samus	ic GILBER	Examiner #: 70632 Date: 6/14/04  S 3 Serial Number: 10/662960  esults Format Preferred (circle): PAPER DISK E-MAIL
Art Unit: 3736 Phone No	umber 30 8 35	53 Serial Number: 10/662960
Mail Box and Bldg/Room Location:	CP24 P25 R	esults Format Preferred (circle): PAPER DISK E-MAIL
If more than one search is submitted, please prioritize searches in order of need. ***********************************		
Include the elected species or structures, ke utility of the invention. Define any terms the known. Please attach a copy of the cover shape.	ywords, synonyms, ac nat may have a special neet, pertinent claims,	
Title of Invention: METHOD	OF NEV.	ROMOBULATION THERAPY
Inventors (please provide full names):	LESCIE S	ROMOBULATION THERAPY
Earliest Priority Filing Date:/ \( \)	SEPT E	2003
		on (parent, child, divisional, or issued patent numbers) along with the
SEE	ATTAC	HEA
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STAFF USE ONLY	Type of Search	Vendors and cost where applicable
Searcher: DAMRON, EMONY	NA Sequence (#)	STN
Searcher Phone #: 30 58 58 7	AA Sequence (#)	Dialog 2 0 30 . 10
Searcher Location: CP2 2 CS	Structure (#)	Questel/Orbit
Date Searcher Picked Up:	Bibliographic 4	Dr.Link
Date Completed: 6/16/04 320f	Litigation	Lexis/Nexis
Searcher Prep & Review Time: 260 M	Fulltext \( \frac{\frac{1}{2}}{2}	Sequence Systems
Clerical Prep Time:	Patent Family	WWW/Internet 🗹
Online Time: Z. GU M	Other	Other (specify)

PTO-1590 (8-01)

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S5
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File 347: JAPIO Nov 1976-2004/Feb (Updated 040607)
         (c) 2004 JPO & JAPIO
File 350:Derwent WPIX 1963-2004/UD, UM &UP=200437
         (c) 2004 Thomson Derwent
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File 348:EUROPEAN PATENTS 1978-2004/Jun W02
         (c) 2004 European Patent Office
File 349:PCT FULLTEXT 1979-2002/UB=20040610,UT=20040603
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                RD (unique items)
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      94: JICST-EPlus 1985-2004/May W4
         (c) 2004 Japan Science and Tech Corp(JST)
                                                                       AFTER
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      95:TEME-Technology & Management 1989-2004/May W4
File
         (c) 2004 FIZ TECHNIK
      99: Wilson Appl. Sci & Tech Abs 1983-2004/May
File
         (c) 2004 The HW Wilson Co.
File
      35:Dissertation Abs Online 1861-2004/May
         (c) 2004 ProQuest Info&Learning
File 111:TGG Natl.Newspaper Index(SM) 1979-2004/Jun 15
         (c) 2004 The Gale Group
File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13
         (c) 2002 The Gale Group
       2:INSPEC 1969-2004/Jun W1
File
         (c) 2004 Institution of Electrical Engineers
       6:NTIS 1964-2004/Jun W2
File
         (c) 2004 NTIS, Intl Cpyrght All Rights Res
       8:Ei Compendex(R) 1970-2004/Jun W1
         (c) 2004 Elsevier Eng. Info. Inc.
      34:SciSearch(R) Cited Ref Sci 1990-2004/Jun W1
File
         (c) 2004 Inst for Sci Info
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
     65:Inside Conferences 1993-2004/Jun W2
File
         (c) 2004 BLDSC all rts. reserv.
File 473:FINANCIAL TIMES ABSTRACTS 1998-2001/APR 02
         (c) 2001 THE NEW YORK TIMES
File 474: New York Times Abs 1969-2004/Jun 15
         (c) 2004 The New York Times
File 475: Wall Street Journal Abs 1973-2004/Jun 15
         (c) 2004 The New York Times
File 481: DELPHES Eur Bus 95-2004/May W5
         (c) 2004 ACFCI & Chambre CommInd Paris
      48:SPORTDiscus 1962-2004/Jun
File
         (c) 2004 Sport Information Resource Centre
File
      50:CAB Abstracts 1972-2004/May
         (c) 2004 CAB International
File 155:MEDLINE(R) 1966-2004/Jun W1
         (c) format only 2004 The Dialog Corp.
       5:Biosis Previews(R) 1969-2004/Jun W1
File
         (c) 2004 BIOSIS
      73:EMBASE 1974-2004/Jun W1
File
          (c) 2004 Elsevier Science B.V.
      71:ELSEVIER BIOBASE 1994-2004/Jun W1
File
         (c) 2004 Elsevier Science B.V.
File 144: Pascal 1973-2004/Jun W1
         (c) 2004 INIST/CNRS
       1:ERIC 1966-2004/Jun 09
File
         (c) format only 2004 The Dialog Corporation
       7:Social SciSearch(R) 1972-2004/Jun W1
File
         (c) 2004 Inst for Sci Info
      11:PsycINFO(R) 1887-2004/May W4
         (c) 2004 Amer. Psychological Assn.
```

File 437: Education Abstracts 1983-2004/May

(c) 2004 The HW Wilson Co

File 121:Brit.Education Index 1976-2004/Q2

(c) 2004 British Education Index

File 142: Social Sciences Abstracts 1983-2004/May

(c) 2004 The HW Wilson Co

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AFTER
REVIEW
      16:Gale Group PROMT(R) 1990-2004/Jun 15
         (c) 2004 The Gale Group
File 160: Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
File 148:Gale Group Trade & Industry DB 1976-2004/Jun 15
         (c) 2004 The Gale Group
File 149:TGG Health&Wellness DB(SM) 1976-2004/Jun W1
         (c) 2004 The Gale Group
File 621: Gale Group New Prod. Annou. (R) 1985-2004/Jun 15
         (c) 2004 The Gale Group
File 444: New England Journal of Med. 1985-2004/Jun W2
         (c) 2004 Mass. Med. Soc.
File 441:ESPICOM Pharm&Med DEVICE NEWS 2004/Jun W2
         (c) 2004 ESPICOM Bus. Intell.
File 369: New Scientist 1994-2004/Jun W1
         (c) 2004 Reed Business Information Ltd.
File 370:Science 1996-1999/Jul W3
         (c) 1999 AAAS
File 129:PHIND(Archival) 1980-2004/Jun W1
         (c) 2004 PJB Publications, Ltd.
File 130: PHIND (Daily & Current) 2004/Jun 15
         (c) 2004 PJB Publications, Ltd.
File 135: NewsRx Weekly Reports 1995-2004/Jun W1
         (c) 2004 NewsRx
     98:General Sci Abs/Full-Text 1984-2004/Jun
         (c) 2004 The HW Wilson Co.
      15:ABI/Inform(R) 1971-2004/Jun 14
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       9:Business & Industry(R) Jul/1994-2004/Jun 14
         (c) 2004 The Gale Group
      47: Gale Group Magazine DB(TM) 1959-2004/Jun 14
File
         (c) 2004 The Gale group
      80:TGG Aerospace/Def.Mkts(R) 1986-2004/Jun 15
File
         (c) 2004 The Gale Group
File 141:Readers Guide 1983-2004/Jun
         (c) 2004 The HW Wilson Co
File 482: Newsweek 2000-2004/Jun 15
         (c) 2004 Newsweek, Inc.
File 484: Periodical Abs Plustext 1986-2004/Jun W1
         (c) 2004 ProQuest
File 635: Business Dateline(R) 1985-2004/Jun 15
         (c) 2004 ProQuest Info&Learning
File 636:Gale Group Newsletter DB(TM) 1987-2004/Jun 14
         (c) 2004 The Gale Group
File 646:Consumer Reports 1982-2004/May
         (c) 2004 Consumer Union
File 609: Bridge World Markets 2000-2001/Oct 01
         (c) 2001 Bridge
File 649: Gale Group Newswire ASAP(TM) 2004/Jun 14
         (c) 2004 The Gale Group
File 610: Business Wire 1999-2004/Jun 15
         (c) 2004 Business Wire.
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File 613:PR Newswire 1999-2004/Jun 15
(c) 2004 PR Newswire Association Inc
File 809:Bridge World Markets News 1989-1999/Dec 31
(c) 1999 Bridge
File 810:Business Wire 1986-1999/Feb 28
(c) 1999 Business Wire
File 813:PR Newswire 1987-1999/Apr 30
(c) 1999 PR Newswire Association Inc
File 20:Dialog Global Reporter 1997-2004/Jun 15
(c) 2004 The Dialog Corp.

File 570:Gale Group MARS(R) 1984-2004/Jun 15 (c) 2004 The Gale Group

File 88:Gale Group Business A.R.T.S. 1976-2004/Jun 14 (c) 2004 The Gale Group

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File 347: JAPIO Nov 1976-2004/Feb (Updated 040607)
         (c) 2004 JPO & JAPIO
File 350: Derwent WPIX 1963-2004/UD, UM &UP=200437
         (c) 2004 Thomson Derwent
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29/3,K/18 (Item 18 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

015405745 \*\*Image available\*\*
WPI Acc No: 2003-467886/200344

XRPX Acc No: N03-372419

Providing spinal postural biofeedback to patient using taping for physical medicine treatment, by applying tapes to spine of patient to stimulate patient's skin and provide biofeedback if patient moves in non-compliant manner

Patent Assignee: BRONDER C (BRON-I)

Inventor: BRONDER C

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week US 20030098028 Al 20030529 US 2001997881 A 20011129 200344 B

Priority Applications (No Type Date): US 2001997881 A 20011129 Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 20030098028 A1 4 A61B-019/00

Providing spinal postural biofeedback to patient using taping for physical medicine treatment, by applying tapes to spine of...

#### Abstract (Basic):

- ... The method involves applying undertape and overtape to the spine of a patient, in which the combination...
- physical medicine treatments used by e.g. chiropractors, physical therapists, athletic trainers, nurses, osteopathic, allopathic physicians to treat pain or dysfunction commonly associated with muscoskeletal disorders, conditions or injuries e.g. back and neck disorders, conditions...
- ...any loss of muscular stabilization tone commonly associated with prolonged use of a brace. Provides postural biofeedback whether patient is awake of sleeping. Enables clinician if patient complied with provided instructions to maximize therapeutic benefit of therapeutic procedure.
- ...The figure is a flowchart showing the steps in providing spinal postural biofeedback to patient using taping International Patent Class (Main): A61B-019/00

29/3,K/26 (Item 26 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

015179409 \*\*Image available\*\* WPI Acc No: 2003-239939/200323

XRPX Acc No: N03-191103

Diagnostic method for assisting professional person e.g. medical practitioner to advise client, in which questions presented to client are analysed according to predefined indicators for each question Patent Assignee: MEDIVISION INT PTY LTD (MEDI-N); CLARKSON J G (CLAR-I)

Inventor: CLARKSON J G

Number of Countries: 100 Number of Patents: 003

Patent Family:

Patent No Kind Date Applicat No Kind Date WO 2002AU1127 20030306 WO 200319428 Α1 Α 20020821 200323 20030227 AU 200197221 AU 200197221 Α Α 20011213 200323 US 20030046305 A1 20030306 US 200123429 Α 20011213 200331

Priority Applications (No Type Date): US 200123429 A 20011213; AU 20017247 A 20010824; AU 200197221 A 20011213

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200319428 A1 E 30 G06F-017/60

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

AU 200197221 A G06F-017/60

US 20030046305 A1 G06F-017/00

Diagnostic method for assisting professional person e.g. medical practitioner to advise client, in which questions presented to client are analysed according to predefined indicators for each question

#### Abstract (Basic):

- Professional advisers e.g. medical practitioners prescribe tests in the form of a series of questions for a patient prior to an appointment, and receive the results of the questions along with an indication of the relevance of the subject matter of the questions the patient.
- A computer system presents a questionnaire to a client on a screen. The questionnaire includes a number of questions from which the client can select one or more answers. Each possible answer has an associated numerical value and, by adding up the value for the selected answers, the computer system is able to provide indications regarding the client's position to the professional person. INDEPENDENT CLAIMS are included for; an apparatus for assisting a professional...
- ... Assisting professional advisors e.g. medical practitioners to advise clients e.g. to diagnose psychiatric disorders...
- ...task or advise a client. Patient benefits from an analysis of the results of the questions in which conditions that may have been overlooked by the medical practitioner in reviewing the answers, will be indicated by the computer system and drawn to the attention of the practitioner...

...Title Terms: METHOD ;

29/3,K/32 (Item 32 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv. 015068714 WPI Acc No: 2003-129230/200312 Related WPI Acc No: 2003-075744; 2003-503302; 2003-540098; 2003-687664; 2003-708678 XRAM Acc No: C03-033023 XRPX Acc No: N03-102685 New computer system that collects physical, biological or behavioral data from a subject, useful in drug discovery, e.g. assessing toxic side effects of drugs, interactions among medicines, or effects of environmental manipulation Patent Assignee: BRUNNER D (BRUN-I); PSYCHOGENICS INC (PSYC-N) Inventor: BRUNNER D; GONDHALEKAR V; LAROSE D; LEAHY E; ROSS W P Number of Countries: 101 Number of Patents: 002 Patent Family: Patent No Kind Date Applicat No Kind Date A1 20021121 WO 2002US15981 A 20020515 WO 200292101 200312 B EP 1397144 · A1 20040317 EP 2002746424 Α 20020515 200420 WO 2002US15981 A 20020515 Priority Applications (No Type Date): US 2001326271 P 20011001; US 2001291039 P 20010515 Patent Details: Patent No Kind Lan Pg Main IPC Filing Notes WO 200292101 A1 E 89 A61K-031/56 Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW EP 1397144 A1 E A61K-031/56 Based on patent WO 200292101 Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR New computer system that collects physical, biological or behavioral data from a subject, useful in drug discovery, e... Abstract (Basic): A computer system , which is for mining several experimentally derived information to identify a pattern, is new. The computer system comprises measurement databases, a query server program, a database searching program, and a reporting program that collects a variety of The computer system for mining several experimentally-derived

information to identify a pattern comprises...

...b) a query server program that receives query behavioral, neurological, biochemical and/or physiological data from one or more users of the system ; (...

...c) a database searching program that compares query data with a signature derived from, or with entries from, the previous animal experiments represented...

- ...that generates reports including information representative of the degree of correlation, if any, between the **query** data, and the signature or data entries in the measurement databases...
- ...1) a computer-implemented **method** of identifying potential modes of action of a candidate drug...
- ...6) an animal cage **system** for automated monitoring of animal behavior
- ...The computer system or methods are useful as part of a discovery program for new therapeutic candidates, or as part of a discovery program for detecting unanticipated neurological or psychiatric applications for drugs that were previously investigated for use in other therapeutic areas. The system or methods are also useful as part of a profiling program for assessing potential side-effects of...
- ...types of patients are likely to be at risk when using a particular medicine. The system or method is also useful for assessing potential therapeutic effects of a drug, assessing potential toxic side Technology Focus:
- ... Preferred Method: In method (1), identifying potential modes of action of a candidate drug comprises...
- $\ldots$ a) providing the novel computer system; ( $\ldots$
- ...b) providing access to the computer system by users to input query data; and...
- ...users and the reporting program for reporting to the users correlations, if any, between the query data input by the user, and the activity of the drug or its classes, environmental...
- ...In **method** (2), predicting potential modes of action of a test compound comprises...
- ...In method (3), predicting potential modes of action of an environmental or genetic effect on an animal...In method (4), identifying potential therapeutic applications of test compounds comprises...
- $\ldots$ a) providing the novel system;  $(\ldots$
- ...Preferred Computer System: The signature is a Markov signature or a neural net. The signature is generated by one or more data-mining techniques consisting of an association rules method, a data classification method, a sequence pattern mining method, or a clustering method. The signature is also generated by a principal component analysis method, a K-means and fuzzy clustering method, a serial linkage method, a nearest neighbor method, a logistic regression method, a support vector machine method, a Bayes classification method, and/or a Kohonen self organizing maps clustering method. The database includes behavioral data representative of one or more of the following: sleeping, grooming...
- ...The neurological data includes one or more EEG data, data concerning changes in central nervous system (CNS) structures and/or function (including size and location of necrotic tissue), occurrence of seizures...O2 and/or CO2. The database and (optionally) the signature

are updated to include the **query** data. The database is an annotated database including information representative of the mechanism of action of drugs for which behavioral information has been included in the database. The animal cage **system** for automated monitoring of animal behavior comprises...

- ...image capturing device arranged relative to the animal observation area to capture movement and bodily **positions** of an animal in the observation area...
- ...rate, liquid intake rate, piloerection, perspiration, blood pressure, or neural activity. This apparatus or cage system further includes software for comparing images of the animal from one or more image capture devices, and generating data representative of movement and/or bodily positions of the animal. The data representative of movement and/or bodily positions of the animal includes time code information
- ...device arranged relative to the animal observation area, so as to capture movement and bodily **positions** of an animal in the animal observation area...
- ... Title Terms: SYSTEM;

29/3,K/43 (Item 43 from file: 350) DIALOG(R)File 350:Derwent WPIX

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014518234 \*\*Image available\*\*
WPI Acc No: 2002-338937/200237
Related WPI Acc No: 2000-104862

XRPX Acc No: N02-266530

Treating method for psychiatric patient and physiologic symptoms, involves inducing bilateral stimulations to patient's body, through tactile stimulators bilaterally positioned along patient's body

Patent Assignee: SCHMIDT J G (SCHM-I); SCHMIDT S J (SCHM-I)

Inventor: SCHMIDT J G; SCHMIDT S J

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
US 20020035995 Al 20020328 US 97943844 A 19970722 200237 B
US 99375109 A 19990816

Priority Applications (No Type Date): US 99375109 A 19990816; US 97943844 A 19970722

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes
US 20020035995 A1 10 A61H-001/00 CIP of application US 97943844
CIP of patent US 6001073

Treating method for psychiatric patient and physiologic symptoms, involves inducing bilateral stimulations to patient's body, through tactile stimulators bilaterally positioned along patient's body

#### Abstract (Basic):

- ... The method involves bilaterally positioning two or more tactile stimulators (20A, 20B) on two or more areas of the patient...
- ...more tactile stimulators in an alternating fashion. The tactile stimulators are transferred to different bilateral positions and the induction of bilateral stimulation is repeated.
- For psychiatric patient and physiologic symptoms e.g. clinical depression, addictive disorder, eating disorder, obsessive/compulsive disorder, dissociative disorder, sexual dysfunction, anxiety, panic disorder, learning disabilities, attention deficit disorder...
- $\dots$  Ensures reliable treating of e.g. physiologic symptoms. Simplifies treating  ${\tt process}$  .
- $\dots$  The figure shows the isometric explanatory diagram of the treating process .
- ... Title Terms: METHOD ;

29/3,K/69 (Item 69 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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012048562

WPI Acc No: 1998-465472/199840

XRPX Acc No: N98-362542

Patient with excessive fat body condition treating - by beginning session from individual psychotherapy of second time arriving patients and performing their individual and group interview .

Patent Assignee: MIRKIN V I (MIRK-I)

Inventor: MIRKIN V I

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date RU 2104719 C1 19980220 RU 97108514 Α 19970605 199840 B

Priority Applications (No Type Date): RU 97108514 A 19970605

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

RU 2104719 C1 6 A61M-021/00

... by beginning session from individual psychotherapy of second time arriving patients and performing their individual and group interview ... Abstract (Basic): of group members by attained results that is then used as an indirect information for psychotherapy . Then the patient is set in a Romberg position , followed by introducing a verbal psychological set-up related to amount of kilograms of lost weight for a next week. A...

... ADVANTAGE - Simpler method and stabilisation of attained results...

... Title Terms: PSYCHOTHERAPEUTIC ;

29/3,K/72 (Item 72 from file: 350)
DIALOG(R)File 350:Derwent WPIX

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011603593 \*\*Image available\*\* WPI Acc No: 1998-020721/199803

XRPX Acc No: N98-015800

Apparatus for physical therapy of back musculature in humans - incorporates lying mat over which projects at least one pressure body,

its position on mat being variable
Patent Assignee: MORGER O (MORG-I)

Inventor: MORGER O

Number of Countries: 022 Number of Patents: 002

Patent Family:

Patent No Kind Date Applicat No Kind Date EP 811365 A2 19971210 EP 97810356 Α 19970606 199803 B CH 691346 A5 20010713 CH 961435 Α 19960607 200148

Priority Applications (No Type Date): CH 961435 A 19960607

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 811365 A2 G 7 A61H-015/00

Designated States (Regional): AL AT BE CH DE DK ES FI FR GB GR IE IT LI LT LU LV MC NL PT SE SI

CH 691346 A5 A61H-015/00

Apparatus for physical therapy of back musculature in humans...

- ...incorporates lying mat over which projects at least one pressure body, its position on mat being variable
- ... Abstract (Basic): The lying mat (1) incorporates accommodations (10) for the several pressure bodies (2), the **position** of which in relation to one another is variable. The pressure bodies are balls (2...
- ...ADVANTAGE The apparatus effectively replaces various massage techniques, acupuncture and acu-pressure which have to be carried out by a trained practitioner, are cost-intensive and time-consuming for the patient.
- ... Title Terms: POSITION ;

29/3,K/76 (Item 76 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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011213253

WPI Acc No: 1997-191178/199717

XRPX Acc No: N97-157982

Method of restitution of psycho-physical condition in humans - by rational psychotherapy, conduct to the state of meditation and massage in the position of lying on back or abdomen accompanied by background music and verbal interaction

Patent Assignee: KARACHANOVA L M (KARA-I) Inventor: KARACHANOV V G; KARACHANOVA L M

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week RU 2065758 C1 19960827 RU 95113435 A 19950811 199717 B

Priority Applications (No Type Date): RU 95113435 A 19950811

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

RU 2065758 C1 5 A61M-021/00

Method of restitution of psycho-physical condition in humans...
...by rational psychotherapy, conduct to the state of meditation and massage in the position of lying on back or abdomen accompanied by background music and verbal interaction

- ...Abstract (Basic): The **procedure** includes preliminary rational **psychotherapy**, conduct to the state of meditation, and body massage. The massage is carried out in the **position** of lying on back or abdomen in the form of point massage of face, head...
- ...It is required, in the **process** of restitution, to explain to patient the **questions** of being, cognition of self, life, and other humans, and therefore the verbal interaction is...
- ... USE/ADVANTAGE In medicine, in particular in method of non-medicament restitution of psychophysical state of humans and improvements of bodily functions; useful in psychotherapy of illnesses and prophylaxis. The restitution of psychophysical state is without suppression of free will...

Title Terms: METHOD ;

29/3,K/80 (Item 80 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv. 009511607 \*\*Image available\*\* WPI Acc No: 1993-205143/199325 XRPX Acc No: N93-157767 Psychotherapy appts. for treating undesirable emotional arousal of patient - provides treatment through coordinated and controlled presentation of visual and auditory stimuli to patient controlled in response to measuring physiological responses of patient to stimuli Patent Assignee: WEATHERS L R (WEAT-I) Inventor: WEATHERS L R Number of Countries: 037 Number of Patents: 006 Patent Family: Patent No Kind Date Applicat No Kind Date Week US 5219322 19930615 19920601 Α US 92891696 Α 199325 WO 9324171 19931209 WO 93US5062 Α1 Α 19930527 199350 AU 9343954 Α 19931230 AU 9343954 Α 19930527 199415 EP 644786 19950329 EP 93914210 Α1 Α 19930527 199517 WO 93US5062 Α 19930527 19950921 JP 7508432 W WO 93US5062 Α 19930527 199546 JP 94500780 Α 19930527 A4 19960103 EP 644786 EP 93914210 Α 19930000 199633 Priority Applications (No Type Date): US 92891696 A 19920601 Patent Details: Patent No Kind Lan Pg Main IPC Filing Notes 10 A61M-021/00 US 5219322 Α WO 9324171 A1 30 A61M-021/00 Designated States (National): AT AU BB BG BR CA CH DE DK ES FI GB HU JP KP KR LK LU MG MN MW NL NO PL RO RU SD SE Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL OA PT SE AU 9343954 A61M-021/00 Based on patent WO 9324171 Α A1 E EP 644786 2 A61M-021/00 Based on patent WO 9324171 Designated States (Regional): DE FR GB IT 8 A61M-021/02 JP 7508432 W Based on patent WO 9324171 EP 644786 A61M-021/00 Α4 Psychotherapy appts. for treating undesirable emotional arousal of

Psychotherapy appts. for treating undesirable emotional arousal of patient...

- ...Abstract (Basic): The phsychotherapy apparatus includes a display for presenting visual stimuli observable by a stationarily- positioned patient at right and left extremes of the patient's range of lateral eye movement...
- ...ADVANTAGE Reduces number of treatment sessions, increases number of patients handled by given therapist.

Title Terms: PSYCHOTHERAPEUTIC ;

```
Set
        Items
                Description
S1
        14561
                PSYCHIAT? OR PSYCHOSOMAT? OR PSYCHOLOG? OR PHYSIC?() THERAP?
              OR PSYCHOTHERAP? OR PSYCHO() THERAP? OR CHIROPRACT? OR BIOFEE-
             DBACK? OR BIO() FEEDBACK?
S2
                ENERG? (2N) (HEALTHCARE OR HEALTH() CARE OR MEDICIN?) OR NEUR-
             OMODULAT? OR NEURO() MODULAT? OR NMT OR ACUPRESS? OR ACU() PRES-
S3
       192252
                PATHWAY? OR PATH()(WAY OR WAYS) OR QUERIE? OR QUERY? OR OU-
             ESTION? OR INTERROGAT? OR INTERVIEW?
S4
         1062
                 (MUSCLE()RESPONSE)(5N)(TEST? OR RATE? ? OR RATING OR ASSES-
             S? OR APPRAIS? OR EVALUAT? OR MEASUR? OR DETERMIN? OR ESTIMAT?
              OR GAUG? OR DIAGNOS? OR MONITOR?) OR MRT
S5
                 (PATIENT? OR SUBJECT? ?) (10N) (PRACTITIONER? OR THERAPIST?)
S6
          410
                DNFT OR DIRECT() (NONFORCE OR NON() FORCE) () TECHNIOUE OR MUS-
             CLE()TEST? OR (ORING OR O()RING)()TEST? OR LEG()LENGTH()TEST?
             OR PHYSIC?()STIMULAT?
S7
          169
                 (SEMANTIC? OR CLINIC?) (3N) ALGORITHM?
                 (CONCIOUS? OR SUBCONCIOUS?) () LEVEL?
S8
            2
S9
            0
                 (OPTIM? OR CORRECT?)(2N)(COMMAND()STATEMENT?) OR (VERBAL? -
             OR NONVERBAL?) () CORRECT? () COMMAND?
                DYSFUNCTION? OR AUTONOMIC?()(FUNCTION? OR RESPONSE?)
S10
        19617
S11
       930774
                POSTUR? OR POSITION?
S12
         1141
                (PATHWAY? OR PATH()(WAY OR WAYS))(3N)(PERNICIOUS? OR SENSO-
             RY? OR MOTOR? OR ALLERG? OR INFECT? OR EXOGENOUS? OR TOXIN? OR
              MORPHIC?)
                METHOD? ?
S13
      1323268
                SYSTEM? ?
S14
      1155122
S15
      1026429
                PROCESS??
S16
       451222
                PROCEDURE? ?
S17
       581669
                TECHNIQUE? ?
S18
        53661
                IC=A61B?
S19
        16737
                S1:S2
S20
         1122
                S19 AND S18
S21
        16176
                S19 AND S13:S17
S22
        16737
                S19:S21
S23
                S22 AND S3
         6857
S24
                S23 AND (S4:S10 OR S12)
         2650
S25
          944
                S23 AND (S4:S9 OR S12)
S26
         2650
                S24:S25
S27
          282
                S26 AND S3(5N) (S4:S10 OR S12)
S28
          165
                S26 AND S1:S2(5N)(S4:S10 OR S12)
S29
           15
                S27 AND S28
S30
          432
                S27:S28
S31
           27
                $30 AND $11(5N)$3
S32
          293
                S25 AND (S4 OR S6 OR S7 OR S8 OR S12)
S33
           23
                S32 AND S18
S34
           62
                S29 OR S31 OR S33
                IDPAT (sorted in duplicate/non-duplicate order)
S35
           62
? show files
File 348: EUROPEAN PATENTS 1978-2004/Jun W02
         (c) 2004 European Patent Office
File 349:PCT FULLTEXT 1979-2002/UB=20040610,UT=20040603
         (c) 2004 WIPO/Univentio
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(Item 26 from file: 349) 35/3,K/26 DIALOG(R) File 349: PCT FULLTEXT

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00923092 \*\*Image available\*\*

SYSTEM FOR MONITORING SEDATION, PARALYSIS, AND METHOD AND NEURAL-INTEGRITY

METHODE ET SYSTEME DE SURVEILLANCE DES ETATS DE SEDATION, DE PARALYSIE, ET D'INTEGRITE NEURALE

Patent Applicant/Assignee:

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Legal Representative:

BURKE Alexander J (et al) (agent), Siemens Corporation - Intellectual Property Dept., 186 Wood Ave. South, Iselin, NJ 08830, US, (US) 6725674

Patent and Priority Information (Country, Number, Date):

WO 200256764 A2-A3 20020725 (WO 0256764) Patent: Application: WO 2002US413 20020108 (PCT/WO US0200413)

Priority Application: US 2001262179 20010117; US 2001991360 20011120

Designated States: CN IN JP NO

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

Publication Language: English

Filing Language: English Fulltext Word Count: 3742

AND SYSTEM Α METHOD FOR MONITORING SEDATION, PARALYSIS, AND NEURAL-INTEGRITY

METHODE ET SYSTEME DE SURVEILLANCE DES ETATS DE SEDATION, DE PARALYSIE, ET D'INTEGRITE NEURALE

Main International Patent Class: A61B-005/11 International Patent Class: A61B-005/0484

Fulltext Availability:

Detailed Description Claims

#### English Abstract

The present invention relates to a system comprising a small stimulator unit (10) which is designed to be mounted near the patient and the associated method . A single cable (12) connects the simulator unit to the patient monitor (15). This cable...

#### French Abstract

L'invention concerne un procede et un systeme dans lequel un petit stimulateur est concu pour etre monte a cote du patient. Un...

#### Detailed Description

A METHOD AND SYSTEM FOR MONITORING SEDATION, PARALYSIS AND NEURAL - INTEGRITY

This is a nonprovisional application of provisional application...

...2001.

#### BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates a method and a system for monitoring sedation, paralysis and neural integrity as is required in surgical and intensive care environments. In particular the present invention relates to a compact and affordable method and system for monitoring these

parameters.

- 2. Field of the Invention In the course of their practice...
- ...Sedation
  Sedatives are administered to render a patient unconscious, prevent stress to the Central Nervous System, and eliminate pain. Care must be taken to avoid oversedating, which wastes expensive anesthetic, delays...
- ... Under-sedating is also a serious problem, which may cause patients to awaken during the **procedure**. Continual assessment of the correct level of sedation is therefore necessary. Anesthesiologist normally rely on...
- ...to ensure the adequacy of sedation, but these signs are not present in certain surgical **procedures**, such as heart bypass surgery, leaving the anesthesiologist without any measure of sedation.

A patient...

...they are presenting is erroneous.

Mid-latency Auditory Potentials (MLAEP) have been proposed as a  $\mbox{method}$  to determine sedation which overcomes the difficulties seen with raw EEG and derived i 0...

- ...EEG while auditory tones are issued to the patient via headphones, and applying signal processing **techniques** to remove all but those signals which are correlated to the tone, so that over...
- ...uInar nerve is stimulated at the wrist, and the thumb response is observed. However, this method is not easily quantifiable, and the documentation must be done manually. An improved variant of this technique utilizes a method of measuring the thumb response directly, and performing calculations on this response to determine paralysis...
- ...parameters are objective, convenient to obtain, and may be documented automatically.

#### Neural Integrity

Certain surgical procedures such as spinal surgery may compromise the integrity of motor and sensory nerve pathways. Any surgery on or near the spine may damage the spinal cord, and any damage must be detected as soon as possible to prevent permanent injury. A standard procedure to attempt to detect any damage is to partially waken the patient, and instruct him/her to "wiggle your toes" upon command. This technique is slow, delaying the surgery and only gives sporadic, subjective measures of pathway integrity.

A superior method which gives continuous, objective measures is to use Somatosensory Evoked Potentials (SEP). Any electric stimulus...

...as the Radial nerve, and a response is observed in the patients EEG.
Signal processing techniques similar to the MLAEP are performed to obtain a waveform of brain patterns correlated to...is required to learn several different interfaces. Therefore it would be desirable to provide a method and system for monitoring these parameters which overcomes the aforementioned drawbacks of the prior art proposals.

#### SUMMARY OF THE INVENTION

The present invention provides a **method** and a **system** for integrating all of these anesthesia monitoring functions into a single module, which

has the...

- ...the embodiment of FIG. 1, as described above, the anesthesiologist may monitor only Neuromuscular Transmission ( NMT ). In this embodiment no EEG
  - module is connected to the system . A single cable is connected between the stimulator unit and the patient, which terminates as...
- ...temperature. Information from the stimulator unit I 0 to the Patient Monitor (FIG. 12A) includes NMT Data (I 2b) which is neuromuscular transmission data. Data from the Patient Monitor 15 to the stimulator module or unit I 0 along cable 12 includes NMT configuration data (12,c see FIG. 12B) to the stimulator/NMT module IO. This stimulator unit (IO) reports the NMT -only configuration to the Patient Monitor (I 5), which enables only the NMT configuration menus, simplifying I 0 theuserinterface. Commands(12c)arethensentfromthePatientMonitor(15)tothe stimulator unit (IO) to start or stop NMT measurements, and to adjust the configuration. Parameters, technical conditions and wavefornis are sent from the...
- ...20) is connected to the stimulator unit (I 0). This embodiment provides for monitoring of NMT, SEP and EEG signals. In this embodiment cable 12 again provides isolated power from the Patient Monitor 15 to the stimulator / NMT module IO as well as a 2 way communication between the stimulator/ NMT module (I 0) and the Patient Monitor 1 5.

The EEG module (20) is connected to the stimulator / NMT module 10 by a cable 13 which provides for a isolated power between the stimulator / NMT module IO and the EEG module 20 as well as two way communication between the stimulator / NMT module 1 0 and the EEG module 20 where data is provided from the EEG module 20 to the stimulator module/ NMT module 1 0 and configuration and a trigger I 0 13c is sent from the stimulator/ NMT module (1 0) to the EEG Module (20).

Information froin the stimulator / NMT module IO to the Patient Module (20) includes NMT , EEG and EP data. The stimulator / NMT module (1 0) receives EEG

data from the EEG module 20. The Patient Monitor 15 sends data to the stimulator/ NMT module IO along cable 12. The Patient Module 15 provides NMT, EEG, EP configurations to the stimulator / NMT module IO along cable 12.

The EEG module20 includes electrodes 17 a-d for monitoring...

#### Claim

- 1 An adaptive **system** for monitoring neurological electrical activity, comprising:
- an electrical stimulation signal generator; an acoustic stimulation signal...
- ...electrical stimulation differently to electrical signals derived in response to acoustic stimulation.
  - 2 The adaptive system according to claim I wherein said electrical stimulator generator is formed of one or more separate units to eacii said unit serving a different stimulus modality.
  - 3 The adaptive system according to claiml wherein said electrical stimulator generator is formed of one or more separate...

- ...located at and to provide to stimulus for a different body location.
  - 4 The adaptive system according to claiml wherein said acoustic stimulator generator is formed of one or more separate units to each said unit serving a different stimulus modality.
  - 5 The adaptive system according to claiml wherein said acoustic stimulator generator is formed of one or more separate...
- ...located at and to provide to stimulus for a different body location.
  - 6 The adaptive system according to claim 1, wherein said adaptive system also monitors neuromuscular activity and said conditioning network conditions electrical signals representing muscular activity, I...
- ...configured for processing conditioned electrical signals derived by electrical stimulation of muscle.
  - 7 The adaptive system according to claim I wherein said stimulator is a single electrical stimulation generator circuit for monitoring both neuromuscular transmission monitoring and somatosensory evoked potential.

    8. The adaptive system according to claim 1 wherein said electrodes are a single pair of electrodes for monitoring both 'NMT and SEP.

    9 The adaptive system according to claim 1 wherein said stimulator is a stimulator device adapted to auto-configures...
- ...a neuromuscular transmission monitoring device only when not connected to said EEG module. The adaptive **system** according to claim I further comprising a digital serial interface for sending trigger information from...
- ...to an EEG device for synchronization with a spontaneous EEG signal. 1 1. The adaptive system according to claiml further comprising a single trigger line for transmitting a combined time-of...
- ...different stimulation modes or sites when triggering an EEG device. I  $\boldsymbol{0}$ 
  - 12 The adaptive system according to claiml wherein said probes are a single pair of stimulator probes to illicit SEP and NMT signals either independently or simultaneously.
- 13 The adaptive system according to claiml further comprising said electrodes coupled to said conditioning network are a single...
  ...of electrodes for monitoring muscle and neurological electrical activity of a patient.
  - 14 An adaptive system for monitoring neurological electrical activity, comprising: an electrical stimulation signal generator; a conditioning network for...
- ...electrical stimulation differently to electrical signals derived in response to acoustic stimulation.
  - 15 The adaptive system according to claimI4 wherein said electrical stimulator generator is formed of one or more separate units to each said

unit serving a different stimulus modality.

- 16 The adaptive **system** according to claimI4 wherein said electrical stimulator generator is formed of one or more separate...
- ...located at and to provide to stimulus for a different body location.
  - 17 The adaptive **system** according to claim 14 wherein said acoustic stimulator generator is formed of one or more separate units to each said unit serving a different stimulus modality.
  - 18 The adaptive **system** according to claim I 4 wherein said acoustic stimulator generator is formed of one or...
- ...located at and to provide to stimulus for a different body location.
  - 19 An adaptive **system** according to claim 14, wherein said conditioning network conditions electrical signals representing acoustic stimulation activity...
- ...is adaptively configured for processing conditioned electrical signals derived by acoustic stimulation.
- 20 The adaptive system according to claim 14 wherein said stimulator is a single electrical stimulation generator circuit for monitoring both neuromuscular transmission monitoring and somatosensory evoked potential. 2 1. The adaptive system according to claim 14 wherein said electrodes are a single pair of electrodes for monitoring both NMT and SEP signals. I 0 22. The adaptive system according to claim 14 wherein said stimulator is a stimulator device adapted to auto-configures...
  ...neuromuscular transmission monitoring device only when not connected to said EEG module.
  - 23 The adaptive **system** according to claim 14 further comprising a digital serial interface for sending trigger information from...
- ...stimulator to an EEG device for synchronization with a spontaneous EEG signal.
  - 24 The adaptive **system** according to claim 14 further comprising a single trigger line for transmitting a combined time...
- ...differentiate among different stimulation modes or sites when triggering an EEG device.
  - 25 The adaptive **system** according to claim 14 wherein said probes are a single pair of stimulator probes to illicit SEP and **NMT** either independently or simultaneously.
  - 26 The adaptive **system** according to claimI4 further comprising said electrodes coupled to said conditioning network are a single pair of electrodes for monitoring muscle and neurological electrical activity of a patient.
  - 27 A **method** for monitoring neurological electrical activity, the steps comprising: generating an electrical stimulation signal; generating an...
- ... said electrical stimulation differently to electrical signals derived in

response to acoustic stimulation.

- 28 The method according to claim 27 wherein said electrical stimulation signal is generated by an electrical stimulator...
- ...or more separate units to each said unit serving a different stimulus modality.
  - 29 The **method** according to claim 27 wherein said electrical stimulation signal is generated by an electrical stimulator...
- ...said unit is located at and provides stimulus for a different body location. 30 The **method** according to claim 27 wherein said acoustic stimulation signal is generated by an acoustic stimulator...
- ...more separate units wherein each said unit serves a different stimulus modality. 3 1. The **method** according to claim 27 wherein said acoustic stimulator signal is generated by an acoustic stimulator...
- ...is located at and provides stimulus for a different body I O location.
  - 32 The method according to claim 27 further comprising the step of conditioning electrical signals representing acoustic stimulation activity, and processing conditioned electrical signals derived by acoustic stimulation.
  - 33 The **method** according to claim 27 further comprising the step of monitoring both neuromuscular transmission monitoring and somatosensory evoked potential.
  - by means of a single electrical stimulation generator circuit
  - 34 The **method** according to claim 27 further comprising the step of monitoring both **NMT** and SEP signals by means of a pair of electrodes.
  - 35 The **method** according to claim 27 further comprising the step of providing a stimulator device adapted to...
- ...a neuromuscular transmission monitoring device only when not connected to said EEG module.
  - 36 The **method** according to claim 27 further comprising the step of sending trigger information through a digital...
- ...potential stimulator to an EEG device for synchronization with a spontaneous EEG signal.
  - 37 The **method** according to claim.27 further comprising the step of transmitting a combined time-of-occurrence...
- ...sites when triggering an EEG device by means of a single trigger line.
  - 38 The method according to claim 27 further comprising the step of eliciting SEP or NMT signals either independently or simultaneously by means of a single pair of stimulator probes.
  - 39 The **method** according to claim27 further comprising the step of monitoring muscle and neurological electrical activity of...

(Item 52 from file: 349) 35/3,K/52

DIALOG(R) File 349: PCT FULLTEXT

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\*\*Image available\*\* 00381581

PSYCHOTHERAPY APPARATUS AND METHOD FOR AFFECTING PATIENT RESPONSE **PATTERNS** 

DISPOSITIF ET PROCEDE DE PSYCHOTHERAPIE POUR AFFECTER LES REACTIONS DU PATIENT

Patent Applicant/Assignee:

WEATHERS Lawrence R,

Inventor(s):

500

WEATHERS Lawrence R,

Patent and Priority Information (Country, Number, Date): Patent: WO 9722324 A1 19970626

Application: WO 96US19971 19961218 (PCT/WO US9619971)

Priority Application: US 95574196 19951218

Designated States: CA JP AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Publication Language: English Fulltext Word Count: 7849

PSYCHOTHERAPY APPARATUS AND METHOD FOR AFFECTING PATIENT RESPONSE **PATTERNS** 

DISPOSITIF ET PROCEDE DE PSYCHOTHERAPIE POUR AFFECTER LES REACTIONS DU PATIENT

Fulltext Availability:

Detailed Description

Claims

#### English Abstract

A psychotherapy apparatus and method for inputting and shaping new emotional, physiological and cognitive response patterns in a patient includes...

...the patient to control temperature of the patient's hypothalamus, and a computer-implemented expert system for coordinating and timing the occurrence of stimuli and controlling air flow temperature so as ...

#### French Abstract

L'invention concerne un dispositif et un procede de psychotherapie permettant de creer et de moduler de nouvelles reactions emotionnelles, physiologiques et cognitives chez un...

...lui, ce qui permet de controler la temperature de l'hypothalamus du patient, et un systeme expert informatique pour coordonner et echelonner l'apparition des stimulis, et aussi pour reguler la...

Detailed Description

Description

PSYCHOTHERAPY APPARATUS AND METHOD

AFFECTING PATIENT RESPONSE PATTERNS

Technical Field

The present invention generally relates to

psychotherapy techniques and, more particularly, to psychotherapy apparatus and method for inputting and shaping new emotional, physiological and cognitive response patterns in a patient through...

...experience with a

historical or more recent negative experience.

Historically, the primary mode of conducting psychotherapy for treatment of these problems has been by the use of one therapist with one patient or one or more therapists with a small group of patients. This 30 mode of psychotherapy has been carried out mainly through verbal communication between therapists and patients, A significant drawback of relying primarily on verbal communication to conduct psychotherapy is that a large number of treatment sessions are needed to adequately deal with these...

...profit

from verbal therapies. Also, many problems, through learned, do not respond well to verbal psychotherapy.

These include problems such as asthma, allergies, chronic pain syndrome, attention deficit disorder, etc.

As a consequence, a need was recognized by the inventor psychologist herein for a different approach to psychotherapy for treatment of emotional problems and emotionally-aggravated physical problems which approach will overcome the...

...drawbacks without

introducing new ones in their place. This need was substantially fulfilled by the **psychotherapy** apparatus and **method** of U,S. Pat. No. 5,219,322 which issued to the inventor herein on June 15, 1993, The goal of the patented **psychotherapy** apparatus and **method** was to provide treatment of an undesirable emotional arousal of a patient through coordinated and...a desired behavior.

Continuing efforts made by the inventor herein with respect to the patented **psychotherapy** approach has led to the realization that by controlling and incorporating additional sources of stimulation...

...disclosed in the above-cited patent, the purpose and scope of applications of the patented **psychotherapy** approach can be substantially expanded beyond merely the elimination of undesirable emotional response.

Disclosure of Invention
The present invention provides a psychotherapy
apparatus and method for inputting and shaping new
emotional and cognitive response patterns in a patient.

The **psychotherapy** apparatus and **method** of the present invention achieves its expanded purpose and scope by combining and utilizing a...

...and cognitive response patterns in the patient.

Accordingly, the present invention is directed to a **psychotherapy** apparatus for inputting and shaping new emotional, physiological and cognitive response patterns

in a patient. The **psychotherapy** apparatus basically comprises: means for isolating a patient from external stimuli; means for generating and...

...to and inhaled by the patient to assist in the shaping of the new emotional, psychological and cognitive response patterns in the patient.

More particularly, the patient isolating means includes an...and cooled heat exchangers for receiving the flow of air generated by the fan.

The **psychotherapy** apparatus also comprises: means for actuating extensor and flexor muscles of the patient concurrently with...

...the patient.

Furthermore, the stimuli occurrence coordinating and timing means includes an computer-implemented expert system which is employed to interview the patient and an interviewer of the patient and to evaluate the patient and develop a detailed treatment program to guide and track the patient's treatment. Also, the expert system is electrically connected to the visual and auditory stimuli generating and presenting means, air flow...end of the air flow delivering means.

Further, the present invention is directed to a psychotherapy method for inputting and shaping new emotional, physiological and cognitive response patterns in a patient. The psychotherapy method basically comprises the steps of: isolating a patient from external stimuli; presenting visual and auditory...
...to and inhaled by the patient to assist in the shaping of the new

by the patient to assist in the shaping of the new emotional, psychological and cognitive response patterns in the patient, Further, the psychotherapy method comprises the steps of: actuating extensor and flexor muscles of the patient concurrently with the...

...patient to the stimuli,
Also, the coordinating and timing includes
operating a computer-implemented expert system to
interview the patient and an interviewer of the patient
and to evaluate the patient and develop a detailed
treatment program to...

...coordinating and timing also includes controlling in a desired predetermined coordinated fashion via the expert system, as determined by the treatment program of the patient, the presenting visual and auditory stimuli...drawings in which.

Fig. 1 is a diagrammatic view of a preferred embodiment of a **psychotherapy** apparatus of the present invention.

Fig. 2 is an exploded diagrammatic view of a

platform...

...data about the patient, a remote control station for each patient, a computer implemented expert system for controlling operation of each remote control station via the coordination of a master control station connected between the expert system and each remote control station, Best Mode for Carrying Out the Invention Overall, the psychotherapy apparatus of the present invention utilizes a plurality of separate, but functionally related, components which...

...physiological and cognitive response patterns in the patient P. The complexity of the patient treatment procedures makes it imperative that the psychotherapy apparatus 10 utilize a computer-implemented expert system , The expert system orchestrates all of the components of the apparatus that generate audio sources, light patterns, auditory questions , aromas, visual displays and that monitor and feedback patient physiological data. Thus, the expert system controls all aspects of the patient treatment and responds to a treatment protocol based on an assessment of the individual patient (which is also done by the expert system ), More particularly, the expert system is employed to interview the patient and a human interviewer of the patient and to evaluate the patient and develop a detailed treatment program to...

- ...to update the treatment plan, The treatment plan will be an assemblage of stepwise treatment procedures, selected from a library of such protocols, to address each of the problems that have...
- ...through each treatment protocol that composes their treatment plan, Progress will be tracked by expert system analysis of the physiological monitors attached to the patient, by recorded questions that are asked of 35 the patient and responded to by the patient's pressing buttons, as well as periodic reassessment by the computerized interview system and the human interviewer.

Referring to the drawings and particularly to Fig.

there is illustrated a preferred embodiment of the psychotherapy apparatus of the present invention, generally designated 10, for carrying out these patient treatment procedures in accordance with a preferred embodiment of a psychotherapy method of the present invention. The psychotherapy apparatus 10 basically includes means 12 for isolating the patient P from external stimuli, means...

...thereby control the temperature of the patient's hypothalamus. Referring also to Fig. 5, the **psychotherapy** apparatus 10 also basically includes means 22 for coordinating and timing the occurrence of the...

...described later on, being delivered to the patient P.

In a practical implementation of the psychotherapy apparatus 10 as diagrammatically depicted in Figs. 1 and 2, the patient isolating means 12...and therapeutic,

The visual and auditory stimuli generating and presenting means 14, 16 of the psychotherapy apparatus 10 of the present invention is similar to that used in the apparatus disclosed...25 hypothalamus is cooled by its arterial blood supply, via a rather complicated heat exchanger process, Briefly stated, as a person inhales through the nose, venous blood in the nasal membrane...

...lets the evaporatively cooled venous blood cool the arterial blood it surrounds. Conveniently, this whole process happens just before the arterial blood enters the hypothalamus. The temperature of the hypothalamus is...room
10 and does not affect patient treatment,
Referring to Figs, 1 and 4. the psychotherapy apparatus 10 preferably also includes means 66 for delivering different selected aromas into the flow...
...air delivered to the patient P. The olfactory bulb goes 15 directly into the lymbic system of the brain. The lymbic system is primarily concerned with emotions, So,, aromas are very powerful stimulators of emotions. The aroma...

...unique prior experience. Other responses are based on inherited "domain specific" patterns.

Still further, the psychotherapy apparatus 10 also includes means 72 for actuating extensor and flexor muscles of the patient...would measure spontaneous 35 movement of the push-pull bar 72 in response to changing psychological and physical states. This allows assessment of the patient's evaluation of thse states.

Referring to Fig. 5, the **psychotherapy** apparatus 10 also includes monitoring means 74, preferably although 5 not exclusively in the form...

...control station 78 connected to each remote control station 76, and a computer-implemented expert system 80 for controlling operation of each remote ...76 via the coordination of the master control station 78 5 connected between the expert system 80 and each remote control station 76. In the present embodiment, there can be up to sixteen remote control stations 76 serviced by one expert system 80 through one master control station 78.

The expert **system** 80 preferably includes two computer-implemented subsystems, The first subsystem is a pattern recognition/classifier...

...subsystem, the rule based expert type.

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As seen in Fig. 5, the computer-implemented expert system 80 is electronically connected to the various different stimuli generating means and patient data monitoring...

...70 of the aroma delivery means 66, and the muscle actuating means 72. The expert system 80 causes the operation of such various multiple 35 stimuli means in a desired predetermined coordinated fashion as determined by the patient's treatment program.

More particularly, the expert **system** 80 basically operates in accordance with the following steps.

First: A human therapist interviews the patient,

Second: The expert system interviews the patient and also interviews the therapist about the patient,

Third: The expert system then combines data from the interviews and develops a patient problem list based on the interviews.

Fourth: The expert system selects a set of treatment protocols from a protocol library residing in the computer in which the expert system also resides. These selected protocols will address the elements of the various problems in the...

...a problem from
the problem list to work on in the current session. The
expert system selects the particular treatment protocol
which correspond to the problem selected by the patient.

Sixth: The expert system administers the treatment in accordance with the rules of the selected protocol(s) by causingolfactory, kinesthetic, and aromatic stimuli.

Seventh: The expert system monitors patient data via patient button responses to digitized and operator speech presented questions and physiological measures (which responses as they are received by the 5 expert system are classified by the expert system into meaningful categories). Patient data is composed of patient physiological measures (electroencephalogram, electromyogram, Galvanic Skin...

...responses such as pushing or pulling on the bar and verbal responses.

Eighth: The expert **system** adjusts the generation of the stimuli in response to patient data and also according to...

...may include moving to the next problem on the patient problem list.

Ninth: The expert **system** stores patient problem list progress and an "audit trail" of the treatment and responses at...

...left off.

Tenth: Subsequent sessions typically begin with the fifth step, Every few sessions the procedure is restarted at the First step,
From the above-described steps, it can be understood that the expert system 80 controls all facets of a patient 's treatment, from interviewing each patient and also the therapist of the patient through evaluating the patient and developing a detailed treatment program to administering the treatment program and tracking the patient...

...periodically to update the treatment plan.

The treatment plan is an assemblage of stepwise treatment procedures, selected from a library of such protocols, to address each of the problems that have...

...control all of the variables the apparatus 10 is capable of.

- (1) digitized speech for questions and instructions; (2) changing light and sound patterns; (3) switching different sources of sound such...the coordinating and timing of the occurrence of stimuli includes operating the computer-implemented expert system to interview the patient and a human interviewer of the patient and to evaluate the patient and develop a detailed treatment program to...
- ...the coordinating and timing includes controlling in a desired predetermined coordinated fashion via the expert **system**, as determined by the treatment program of the patient, the presenting visual and auditory stimuli...
- ...means as well as with injection of aromas by using the aroma delivering means. These **procedures** can be performed on the patient with the patient outside of the state of consciousness...
- ...by super or subliminal speech or music. The patient is much more responsive to these procedures because of the dream-like state induced by the moving lights and sound. The individual patient's responsiveness to different variations in these procedures can be tracked by the physiological monitoring. This will allow the expert system to learn what is effective for the individual patient and respond accordingly. It is thought...

Claim

A psychotherapy apparatus for inputting and shaping new emotional, psychological and cognitive response patterns in a patient, said apparatus comprising:

(a) means for isolating a...

...to and inhaled by the patient to assist in the shaping of the new emotional, psychological and cognitive response patterns in the patient,

- 2 The apparatus of claim 1 wherein said...data and for coordinating and timing the occurrence of stimuli includes a computer-implemented expert system operable to interview the patient and an interviewer of the patient and to evaluate the patient and develop a detailed treatment program to guide and track the patient's treatment, said expert system also being connected to said visual and auditory stimuli generating and presenting means, air flow being connected in communication with said discharge side of said fan.

  18 A psychotherapy method for inputting and shaping new emotional, physiological and cognitive response patterns in a patient, said method comprising the steps of:
- (a) isolating a patient from external stimuli;
- (b) presenting visual and...

#### ...and

inhaled by the patient to assist in the shaping of the 20 new emotional, psychological and cognitive response patterns in the patient,

- 19 The **method** of claim 18 further comprising the step of:
- (g) actuating extensor and flexor muscles of the patient concurrently with the receipt of other stimuli.
- 20 The **method** of claim 18 further comprising the step of:
- (g) delivering different selected aromas into the flow of air being delivered to the patient.

  21 The method of claim 18 wherein said receiving and responding to feedback of patient data and said coordinating and timing the occurrence of stimuli includes operating a computer-implemented expert system to interview the patient and an interviewer of the patient and to evaluate the patient and develop a detailed treatment program to guide and track the patient's treatment.
- 22 The **method** of claim 21 wherein said receiving and responding to feedback of patient data and said...
- ...occurrence of stimuli also includes controlling in a desired predetermined coordinated fashion via said expert system, as determined by said treatment program of the patient, said presenting visual and auditory stimuli...

...flow to the

patient to control the temperature of the patient's hypothalamus.

- 23 The **method** of claim 21 further comprising the steps of:
- (g) actuating extensor and flexor muscles of...
- ...delivering different aromas into the flow of air being delivered to the patient,
  - 24 The **method** of claim 23 wherein said receiving and responding to feedback of patient data and said...
- ...of stimuli also includes controlling in a desired predetermined 5 coordinated fashion via said expert system, as determined by said treatment program of the patient, said presenting visual and auditory stimuli...

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MARKERS FOR USE IN SCREENING PATIENTS

MARQUEURS SERVANT A EFFECTUER DES DEPISTAGES SUR DES PATIENTS

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Fulltext Availability: Detailed Description Claims

English Abstract

A method and apparatus for screening patients for nervous system dysfunction including neurological capacity and dysfunction comprises producing a patient profile of actual functional activity of a brain of a patient...

French Abstract

...a un appareil servant a effectuer des depistages sur des patients atteints de dystonie du systeme nerveux. Ce procede consiste a obtenir un profil de l'activite fonctionnelle reelle du cerveau...

Detailed Description

... OF THE INVENTION

The present invention is directed to the screening of patients for nervous system dysfunction including neurological or psychiatric degenerative conditions.

Functional brain imaging by means of positron emission tomography (PET) and single photon...

...the present invention is to provide a marker for use in screening patients for nervous system dysfunction .

This object is achieved in accordance with the invention by the use of a marker...

...premature aging and neurological AIDS.

Another object of the present invention is to provide a method for screening patients for nervous system dysfunction .

This object is achieved in accordance with the present invention by a **method** comprising producing a patient profile of actual functional activity of a brain of a patient...

...activity at a plurality of sets of predetermined coordinates of a given brain geometry.

The method preferably comprises comparing the patient profile with a plurality of markers for different nervous system dysfunctions. In this way, the same scan can be used for screening for different nervous system dysfunctions and the inconvenience of putting a patient through multiple brain scans is eliminated.

The plurality of markers can be for nervous **system dysfunction** selected from Parkinson's disease, Alzheimer's

disease, torsion dystonia, cerebellar degeneration, depression, premature...present invention is to provide an apparatus for determining the presence or severity of nervous system dysfunction in a patient. This object is achieved in accordance with the present invention by providing an apparatus including a memory storing at least one marker for a nervous system dysfunction comprising a profile of predetermined functional activity at a plurality of sets of predetermined coordinates of a given brain geometry. A pre- processor is receptive of data corresponding to functional activity of a brain of a patient for...

...corresponding to the plurality of sets of predetermined coordinates of the given brain geometry. A processor cross-correlates the patient profile with the at least one marker and a post- processor determines the presence or severity of a nervous system dysfunction as a function of the degree of covariance for the cross-correlation.

In accordance with...

...scanner for scanning the patient's brain to produce the data applied to the pre processor. The scanner preferably comprises one of a PET scanner, a SPECT scanner and a functional MRI scanner. The pre-processor preferably comprises a spatial filter for filtering the data and circuitry for performing a log transform on the filtered data.

The post- processor preferably comprises circuitry for rescaling the degree of covariance to produce a patient marker score...

...with a previously obtained patient marker score for the patient to determine severity of a dysfunction .

Further in accordance with the present invention, a plurality of markers are preferably stored in memory and 5 the processor cross-correlates the patient profile with

the plurality of markers. The plurality of markers preferably are for nervous system dysfunctions including Alzheimer's disease, torsion dystonia, cerebellar degeneration, Parkinson's disease, neurological AIDS, depression and...

...the present invention, the scanner can be disposed at a remote location from the pre processor and thus the apparatus further comprises data communication circuitry for transmitting data from the scanner to the pre-processor. The communication can be made by means of wire or wireless transmission, can be carried out by modem over telephone lines or by other networking techniques.

Another object of the present invention is to provide a method for determining the presence or severity of a nervous system dysfunction in a patient.

This object is achieved in accordance with the present invention by a method comprising providing at least one marker for a nervous system dysfunction comprising a profile of predetermined functional activity at a plurality of sets of predetermined coordinates...with the at least one marker and determining the presence or severity of a nervous system dysfunction as a function of the degree of covariance for the crosscorrelation.

In accordance with the present invention, the **method** further comprises scanning the patient's brain to produce data for the patient profile. The...

...transform on the filtered data.

The step of determining the presence or severity of the **dysfunction** preferably comprises rescaling the degree of covariance to produce a patient's score for the marker.

Preferably, the **method** compares the patient's score for the marker with the patient's previous score for that 7

marker to determine the progressive changes in the dysfunction over time.

in a preferred embodiment of the present invention, a plurality of markers are...

...with the plurality of markers so that a single scan can be used for various dysfunctions such as Alzheimer's disease, torsion dystonia, cerebellar degeneration, Parkinson's disease, neurological AIDS, depression and premature aging.

The **method** can preferably be carried out with the scanning performed remotely from the processing of the...

...the present invention, the step of determining the presence or severity of the given nervous system dysfunction is achieved by comparing the patient's score with a

distribution of patients' scores of a patient population having the given nervous system dysfunction, a distribution of patients' scores of a patient population having a different nervous system dysfunction and a distribution of patientsi scores of a patient population 8

not having the given nervous system dysfunction .

The present invention embodies the realization that a pattern of regional brain metabolic activity could...

well as a gauge for assessing disease severity in these and related conditions. This method may also be used as a screen to determine whether a subject's brain function...for diagnosing and objectively rating disease severity and progression in a strictly automated fashion. The method and apparatus of the present invention involves the automated application

...scans for the purpose of diagnosis without reliance upon direct user visualization of images.

The method and apparatus in accordance with the present invention is applicable to any functional imaging modality, including PET, SPECT and functional MRI.

Moreover, the **method** and apparatus can be used with any disease-related network in its analysis of individual...

...particular disease and as a means of age-appropriateness of brain function as a screening **technique** for the assessment of cognitive functioning in the elderly.

The present invention achieves the determination...

...The marker is able to extract diagnostic network information from functional brain images. Anatomical imaging techniques, such as magnetic resonance imaging (MRV and computer tomography (CT), are restricted to showing gross...s disease using PET and SPECT modalities and for the assessment of the normal aging process.

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of a marker to...

The present invention is particularly useful in the diagnosis and assessment of neurodegenerative and psychiatric disorders. These conditions entail primarily Alzheimer's disease and related forms of dementia, as well...

...gauge the effects of normal aging on a case by case basis can afford neurologists, **psychiatrists** and geriatricians a valuable tool in determining whether a given individual is 13 performing according...

,

...differential diagnostic probability information on an automated basis, the invention has vast applicability in neurology, psychiatry, general medicine and geriatrics.

The brain data information from the PET and SPECT sources can...or during the course of a therapeutic intervention. This technology is useful for neurological and psychiatric degenerative illnesses of the brain.

In accordance with the invention, the diagnosis can be performed...

## ... DRAWINGS

Fig. 1 is a block diagram of the apparatus for screening patients for nervous system dysfunction in accordance with the present invention;
Fig. 2 is another embodiment of the apparatus of Fig. 1;
Fig. 3 is a flow chart of the method according to the present invention;
Fig. 3A is a flow chart showing details of Fig. 3;
Fig. 4 is a flow chart of an additional aspect of the method of the present invention;
Fig. 5 illustrates a region of a brain and the 16...

...101 of Fig. 3 is an array of data which is applied to a pre- processor 3 which produces a patient profile from the data in step 102.

Details of the production of the patient profile carried out in pre- processor 3, are set forth in the steps of Fig. 3A. As shown therein, the data...resized and reoriented in step 102a to correspond to a given brain geometry (stereotoxic coordinate system) that has been selected for the purpose of this invention.

The given brain geometry discussed hereinafter, has been defined using the Talairach atlas coordinates. other standardized brain atlas coordinate systems could also be used to define a given brain geometry within the scope of the...

# ...to be

minimized such that all brain slices can be placed in a common coordinate system . The spatial filter can be a Gaussian filter or another type of low pass filter...

 $\dots$  Thus the resulting array will have 1/27 the number of pixel values.

The pre- processor 3 also performs a log transform on the data in step 102c so as to...

...equally) from an individual's brain scan.

In step 103, the output of the pre- processor 3 is then cross-correlated in cross-correlator 5 with at least

one stored marker...addition to the production of patient scores, the likelihood of the 20 patient having the dysfunction being screened for can be

patient having the **dysfunction** being screened for can be further determined in post-**processor** 6 by the steps set forth in Fig. 4.

In that **procedure**, the patient scores are input in step 110 and in step 111, other input variables...

...race, gender,
age, weight, and clinical and medication history. These
additional inputs allow the post- processor to normalize
the patient scores so that they can be compared to scores
of other...

...113 with data distributions for the marker in an established population known to have the **dysfunction** in **question**, patient populations having different but closely related conditions, and normal control populations. This database is...

...upon the comparisons with all of the distributions, the likelihood of a patient having the dysfunction is determined, and a letter can be printed for the doctor (step 114), which includes all of the demographic data and the determined probability of dysfunction. Another important feature of the present invention is the ability to update the database with...

...step 115 so as to make the distributions more accurate for future comparisons.

The pre- processor 3, cross-correlator 5 and post processor 6, as described hereinabove, can be implemented by a microprocessor such as an Intel 80X86...

microcomputer workstation such as those made by HewlettPackard or Sun Microsystems.

For example, the **system** of Fig. 2 can be used in accordance with the **method** to carry out the **method** as described. The functions of the pre- **processor**, post **processor** and cross-correlator of Fig. 1 are carried out by a CPU 10 of a...

...activity
of the bra

of the brain in terms of glucose uptake. This data is input into pre- processor 3. The pre- processor 3, which is preferably constituted by ...and shapes of different subjects' brains, each image slice is resized and reoriented in pre- processor 3 so that it conforms to a given brain geometry with individual pixels defined in terms of a standardized three-dimensional coordinate system , preferably the Talairach Atlas coordinates.

The resized array for the data of Table I is...

...data of Table II is also stored in memory

The next step in the **process** is spatial filtering of the data in pre-**processor** 3. The results of the spatial filtering for the data of Table II is shown...

#### ...13.

In the next step, the values of Table III are log transformed by pre- processor 3 into natural logarithmic values shown in Table IV. The log transformation would, of course...

...disease stored in memory 4 is defined in terms of the same Talairach Atlas coordinate system . In order to simplify the processing, the marker is defined in terms of a series...

#### ...connects

the anterior and posterior commissures, and is the standard reference line for stereotaxic coordinate systems

X, Ye are elliptical origin coordinates
R11 R2 are principal axes radii
Ang the acute...of local brain function, the regional weights that comprise the marker for any given nervous system dysfunction or for normal aging, can be somewhat different for PET, SPECT and functional MRI. The...

..: the application of the marker to any new brain image, and permits a completely automated method of patient score calculation.

The result of the pixel-by-pixel multiplication of the two...

# ...the relevant

marker values in Table VI. From this data which is input to post- processor 6, the covariance between the marker and the patient's profile is obtained, and this...

...a mean array acquired across a large sample of normal subjects.

Upon rescaling in post- processor 6, the score for the patient is The score is compared in post- processor 6 to known statistical distributions of the scores in established populations of normals and patients with the disease in question to determine the likelihood of the disease. As a result, the patient is calculated to...a patient's brain and use that same scan to screen for 28

different nervous **system dysfunctions** . This reduces the inconvenience to the patient.

The specific marker is defined as a table...

#### Claim

1 A marker for use in screening patients for

nervous system dysfunction, comprising: a profile of predetermined functional activity at a plurality of sets of predetermined coordinates...

- ...Alzheimer's disease, torsion dystonia, cerebellar degeneration, depression, premature aging and neurological AIDS.
  - B. A method for screening patients for nervous system dysfunction, comprising the steps of: producing a patient profile of actual functional activity of a brain...
- ...at a plurality of sets of predetermined coordinates of a given brain geometry.
  - 9 The method according to claim 8, wherein the step of comparing comprises comparing the patient profile with a plurality of markers for different nervous system 42

## dysfunctions .

- 10 The method according to claim 9, wherein the plurality of markers are for nervous system dysfunctions selected from Parkinson's disease, Alzheimer's disease, torsion dystonia, cerebellar degeneration, depression, premature aging and neurological AIDS.
- 11 The **method** according to claim 8, wherein the step of producing a patient profile comprises calculating numerical...
- ...to the plurality of sets of predetermined coordinates of the given brain geometry.
  - 12 The **method** according to claim 11, wherein the step of calculating comprises producing a single numerical value...
- ...each region of interest.
  - 13 An apparatus for determining the presence or severity of nervous system dysfunction in a patient, comprising: a memory storing at least one marker for a 43

nervous system dysfunction comprising a profile of predetermined functional activity at a plurality of sets of predetermined coordinates of a given brain geometry; a pre-processor receptive of data corresponding to functional activity of a brain of a patient for producing...

- ...corresponding to the plurality of sets of predetermined coordinates of the given brain geometry; a processor for cross-correlating the patient profile with the at least one marker; and a post-processor for determining the presence or severity of a nervous system dysfunction as a function of the degree of covariance for the crosscorrelation.
  - 14 The apparatus according...
- ...scanner for scanning the patient's brain to produce the data applied to the pre- processor .

- 15 The apparatus according to claim 14, wherein the scanner comprises one of a PET...
  ...and a functional MRI scanner.
  - . The apparatus according to claim 13, wherein the pre- processor comprises a spatial filter for filtering the data.
  - 17 The apparatus according to claim 16, wherein the pre- processor further comprises a circuit for performing a log transform on the filtered data.
  - 18 The apparatus according to claim 13, wherein the post-processor comprises circuitry for rescaling the degree of covariance to produce a patient marker score.
  - 19 The apparatus according to claim 18, wherein the post- processor further comprises circuitry for comparing a patient marker score with a previous patient marker score for the patient to determine severity of a dysfunction .
  - 20 The apparatus according to claim 13, comprising a plurality of markers stored in memory and wherein the **processor** cross-correlates the patient profile with the plurality of markers.

    45
  - . The apparatus according to claim 20, wherein the plurality of markers are for nervous system dysfunctions selected from the group comprising Alzheimer's disease, torsion dystonia, cerebellar degeneration, Parkinson's disease...
- ...22 The apparatus according to claim 14, wherein the scanner is remote from the pre-processor and further comprising data communication circuitry for transmitting data from the scanner to the pre-processor.
  - 23 A method for determining the presence or severity of nervous system dysfunction in a patient, comprising the steps of providing at least one marker for a nervous system dysfunction comprising a profile of predetermined functional activity at a plurality of sets of predetermined coordinates...
- ...with the at least one marker; and determining the presence or severity of a nervous system dysfunction as a function of the degree of covariance for the cross-correlation.
  - 24 The method according to claim 23, further comprising scanning the patient's brain to produce data for producing the patient profile.
  - 25 The **method** according to claim 24, wherein the scanning comprises one of PET scanning, SPECT scanning and functional MRI scanning.
  - 26 The method according to claim 24, wherein the step of producing the patient profile comprises spatially

filtering the data.

- 27 The **method** according to claim 26, wherein the step of producing the patent profile further comprises performing a log transform on the filtered data.
- 28 The method according to claim 23, wherein the 47 step of determining the presence or severity of the dysfunction comprises rescaling the degree of covariance to produce a patient score for a marker.
- 29 The method according to claim 28, wherein the step of determining the presence or severity of the dysfunction further comprises comparing a patient score for a marker with a previous patient score for that marker for the patient.
- 30 The **method** according to claim 23, comprising providing a plurality of markers and wherein the steps of cross-correlating the patient profile comprises crosscorrelating with the plurality of markers.
- 31 The method according to claim 30, wherein the plurality of markers are for nervous system dysfunctions selected from the group comprising Alzheimer's disease, torsion aystonia, cerebellar degeneration, Parkinson's disease, neurological AIDS, depression and premature aging.

The **method** according to claim 24, wherein the scanning is performed remotely from the production of the patient profile and further comprising for transmitting data from a scanner.

33 The method according to claim 28, wherein the step of determining the presence or severity of a given nervous system dysfunction further comprises comparing the patient score with a distribution of patient scores of a patient population having the given nervous system dysfunction, a distribution of patient scores of a patient population having a different nervous system dysfunction and a distribution of patient scores of a patient population not having the given nervous system dysfunction.

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METHOD AND APPARATUS FOR MEASURING PSYCHOTHERAPY OUTCOMES PROCEDE ET APPAREIL DE MESURE DE RESULTAT DE PSYCHOTHERAPIE Patent Applicant/Assignee:

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Detailed Description
Claims

## English Abstract

A method and apparatus for measuring a patient's psychotherapy progress is provided. Initial patient mental health is measured by administering a questionnaire measuring three psychological variables. The three psychological variable measures are combined into a mental health index (69). Following a number of sessions of psychotherapy, the patient's subsequent psychological condition is again measured using the three psychological variables. Patient session records (42) are stored in a large database (20). Patient progress can...

...the database (20), and patient improvement as a function of a number of sessions of psychotherapy can be determined. The system further provides a case manager with a measure of the effectiveness of continued psychotherapy sessions, and a basis of comparison of various psychotherapy providers.

# French Abstract

Procede et appareil de mesure du progres psychotherapeutique d'un patient. On mesure la sante mentale initiale d'un patient en le soumettant a un questionnaire mesurant trois variables psychologiques. On combine les mesures des trois variables psychologiques pour obtenir un indice de sante mentale (69). Apres un certain nombre de seances de psychoterapie, on mesure a nouveau l'etat psychologique ulterieur du patient au moyen des trois variables psychologiques. Les bilans (42) des seances du patient sont conserves dans une grande base de donnees...

- ...Ainsi il est possible de comparer les progres du patient par rapport a un etat **psychologique** initial de celui-ci, des resultats de patients typiques stockes dans la base de donnees...
- ...ameliorations de l'etat du patient en fonction d'un certain nombre de seances de psychotherapie. Le systeme prevoit egalement un gestionnaire de cas comportant une mesure de l'efficacite de seances de

psychotherapie continue, et une base de comparaison des divers psychotherapeutes .

Detailed Description
ETHOD AND APPARATUS FOR
MEASURING PSYCHOTHERAPY OUTCOMES
Background Of The Invention
This invention relates to psychotherapy. More
particularly, this invention relates to a system for
measuring and quantifying a patient's psychological
condition and the progressf stasis, or retrogression
thereof, and for administering pyschotherapy based on such...

...have increased absenteeism.

Moreover, the families of such employees typically use the general health care system at an increased rate.

Mental health care may be characterized by two characteristic's of...

- ...health care have been difficult if not impossible to measure. Accordingly, efforts to improve the system for delivering mental health care have focused on cost, the only measured variable in the system. Since the cost parameter can be measured, systems which minimize cost tend to be rewarded without regard to the unknown effect of cost...
- ...or to terminate care as early as possible. However, without a reasonably accurate and objective method of evaluating cases, a case manager or other interested person is unable to rationally allocate the limited resources for psychotherapy among those who demand it. For instance, extensive resources may be allocated to patients who...
- ...denied to patients who would show substantial improvement with limited treatment. Moreover, without such a **method** the case manager or other interested person cannot rationally determine which providers should be engaged...
- ... treatment in an individual case or on an overall basis.

Lacking an ability to measure psychotherapy outcomesr efforts to select a provider and a course of therapy have focused on process measures, i.e. measures which attempt to infer the effect of therapy from characteristics of the therapy process such as the credentials of the provider.

Too often the therapy approved and provided to...It is therefore a general object of the invention to provide an objective and reliable method and apparatus (" system ") for measuring the psychological condition of a person.

it is a further object of the invention to
provide a system for measuring the outcome of
 psychotherapy , i.e. its effect upon the psychological

condition of a person.

It is a further object of the invention to provide. a system for administering psychotherapy using measurements of psychological condition to initially determine, and as feedback to monitor and control, the course of psychotherapy provided to a person.

It is a further object of the invention to provide a **system** for evaluating the relative effectiveness of **psychotherapy** providers.

The present invention provides an apparatus and a method for measuring a patient's psychological condition and changes therein. The method preferably provides a single number indicative of a person's overall psychological condition, as well as single numbers indicative of a person's psychological condition with respect to each psychological variable involved in the measurement. The invention further includes various methods of administering psychotherapy based on such measurements.

One such method is for feedback control of providing psychotherapy to a patient and includes the steps of measuring the patient's initial psychological condition with respect one or more psychological variables, and preferably three specific variables; administering a dose of psychotherapy; measuring the patient's subsequent psychological condition with respect to the measured psychological variables; and comparing the subsequent measurement with the initial measurement to determine the patient's progress, These steps may be repeated, using measured information to appropriately modify the psychotherapy provided in subsequent doses, until measurements indicate that further psychotherapy is not needed because the patient's psychological condition is acceptable or that further psychotherapy is unjustifiable because significant improvement is not expected or the expected benefit of further treatment cannot be justified by its expected cost.

Another such method is to evaluate the relative effectiveness of psychotherapy providers, including individual therapists and/or organizations which provide or pay for psychotherapy services\* In accordance with this method, the effectiveness of such providers may be determined based upon measurements of the psychological condition of' the patients to whom they provide psychotherapy. For instance, improvement of psychological condition per dose of psychotherapy may be computed as a figure of merit indicating effectiveness.

In accordance with the invention, measurement of psychological condition is based upon tests. Preferably, such tests are administered to a patient by obtaining responses to a set of standardized questions. It is particularly preferred to obtain self-reporting responses of the patient as well as...

... of the patient.

The apparatus of the invention provides means for recording responses to a psychological test,, preferably the patient's self-reported responses as well as a clinician's professional evaluation; a processor for calculating measures of the patient's psychological condition with respect to one or more psychological variables from the recorded responses, and preferably also for calculating a single-valued mental health index and clinical assessment index derived from the measured psychological variables; means for storing psychotherapy 5 session records for a number of psychotherapy sessions, and preferably also for storing benchmark measures of the psychological variables; and means for determining a particular patient's progress by comparing measurements of the patient's psychological condition taken at different times. Preferably the apparatus includes a database of responses recorded with...

...which may be stored
 in the apparatus;
 Figure 3 is a flow diagram illustrating a method
 of establishing benchmark values for measured
 psychological variables;
 Figure 4 is a dose-response graph for certain
 psychological variables;
 Figure 5 is a dose-response graph for a
 composite mental health index computed...

...typical courses
a mental illness may take;
Figure 7 is a flow diagram illustrating a method
for administering psychotherapy utilizing measurements
obtained in accordance with the invention;
Figure 8 is another dose-response graph...

...is a listing of the example patient's
20 percentile ranking with respect to certain psychological variables;
Figure 12 is a flow diagram of a method of allocating psychotherapy resources among patients;
Figure 13 is a flow diagram of a method of allocating psychotherapy resources among providers; and Figure 14 is a block diagram of a network in accordance with the invention.

Detailed Description Of The Invention
The present invention provides an apparatus and
method for providing standardized replicable measurements
of psychological condition and psychotherapy outcomes for
patients. The system quantifies psychological condition
and progress, stasis or retrogression thereof by means of
a psychological test which determines a person's condition
with respect to one or more psychological variables. Test
results for individuals are collected and stored in a
computer database. As the...

...of various therapy providers. The data are combined using algorithms to create numerical measures of

psychological condition and the outcome of treatment,
Measurements taken at the outset and at successive
intervals during psychotherapy provide finite measures of
the patient's ability to deal with problems, both
perceived and...

... changes therein due to therapy.

In accordance with the preferred embodiment of the invention, the psychological test of a patient includes self-reported responses of a patient to a standard patient questionnaire as well as a clinician's professional evaluation of the patient provided in response to a standard clinician questionnaire. Further in accordance with the preferred embodiment, the test provides responses indicative of the patient's condition with respect to a plurality of psychological variables, Such variables desirably include one or more of the following.

subjective well-being; symptomatic distress; current life functioning; self-esteem; coping; temperament; and attitude. Applicant prefers to measure psychological condition with respect to three of these psychological variables: subjective well-beingt symptomatic distress, and current life functioning. Subjective well-being is a...

...conception of contentment.

Subjective well-being includes dimensions of distress, energy and health, emotional and psychological adjustment, and current life satisfaction. Symptomatic distress includes the psychological diagnoses of adjustment disorder, anxiety, bipolar disorder, depression, obsessive-compulsive disorder, phobia, and substance use...

...functioning, health and grooming, intimate relationships, self-management, social relationships, and Patient responses to a questionnaire are used to assess the psychological variables for each patient.

Applicant's presently preferred questionnaire is included in Appendix A to this application, "Outpatient Therapy Effectiveness Tracking System", and includes 11 questions directed to subjective well-being, 40 questions directed to symptomatic distress, and 24 questions directed to 5 current life functioning, as well as, questions directed to other areas. An analysis of this questionnaire is provided in Appendix B to this application, "The Howard Outpatient Tracking System". The questionnaire may be administered in the form of a test booklet, with the answers recorded on...

...prefers to obtain a clinician's professional evaluation of a patient with respect to two psychological variables: a global assessment of psychopathologyr and an assessment of the patient's current life...94/04072 PCT/US93/07969 is included in Appendix A, and an analysis of the questionnaire is included in Appendix B.

While the questionnaires set forth and described in Appendices A and B are presently preferred, other

questionnaires suitable for use in the invention may already exist or may be devised.

Responses to the questionnaires, whether by the patient or the clinician, are used to compute single valued quantities as psychological measures of the patient. Patient responses may be used to compute scaled scores with respect to each measured variable as psychological measures. They may also be used to compute as a psychological measure a single number indicative of the patient's overall psychological condition, which Applicant refers to as a "mental health index" or MHI.

Likewise, the clinician...

...each variable evaluated as well as a single-valued "clinical assessment index" or CAI as psychological measures.

Figure 1 shows an exemplary embodiment of an apparatus for practicing the present invention...

...input patient related data, preferably data from both patient and clinician responses from their respective questionnairest to a memory 40 by means of a processor 20. Memory 40 includes patient session records 42, preferably structured as a databasef algorithms 43 for computations including computations of psychological condition with respect to the raw data, and preferably PCT/US93/07969 also data representing...

# ...pertains;

patient demographic data 61 such as age, gender, and education; presentation problem data 62; patient expectation data 63; therapist code 64 identifying the therapist; session number code 65 indicating the number of sessions that the patient has attended; well...

...The records in the database also desirably include a field for data 73 representing the patient 's perception of the therapist and the patient - therapist relationship.

With respect to the preferred questionnaires of ...A. the patient demographic data 61 may be derived from responses to the Personal Information questions ; the presentation problem data 62 may be derived from responses to the Presenting Problems questions; the patient expectation data 63 may be derived from responses to the Treatment Needs and Expectations questions; the current well-being measure 66 may be derived from responses to the 5 Current Well-Being questions; the symptomatic distress measure 67 may be derived from the Current Symptoms questions; the current life functioning measure 68 may be derived from responses to the Current Life Functioning questions; the clinician data 71 and 72 may be derived from responses recorded on the Clinician Form; and data 73 representing the patient 's rating of the therapist may be derived from responses to the Therapist Ratings questions . The data in the **patient** records 42 may be organized in a variety of fashions. For instance, instead of single...

...accordance with such data organization, and as illustrated in Appendix A, 25. separate sets of questionnaires may be provided for initial or intake data and for data obtained during the course of therapy.

Several options are available for storing data relating to psychological condition. Regarding the patient-reported datar the raw data from the patient responses to the well being, symptomatic distress, and current life functioning questions may be stored; and/or psychological measures comprising single valued quantities representing the patient's condition with respect to each such...

...single-valued quantities
if the computation algorithms are changed, for instance
upon revision of the questionnaires; while Applicant
prefers to store computed psychological measures, whether
or not the computed quantities are stored will depend on
the use@r...

...needed; the same is true for the composite mental health index and clinical assessment index psychological measures.

The apparatus of Figure 1 also includes an output means 50t which can be...suitable input means instead of or in addition to the preferred optical scanner input device.

Processor 20 operates on data relating to a test of a patient which has been input... ...with algorithms 43 to produce single valued computed quantities with respect to each of the psychological variables tested and overall indices of mental health and clinical assessment. Such algorithms will generally include scaling and weighting steps, to combine responses to individual questions into an appropriately scaled score as a psychological measure with respect to the relevant individuals variables and the overall indices, The scaling and weighting functions employed will be dependent on the relative importance and reliability of the questions involved. Since the scaling and weighting functions are entirely dependent on the particular questionnaires used, they cannot be specified in general terms.

With a suitable questionnaire and means for operating on the responses, it becomes possible to provide means for reliably measuring a person's psychological condition and changes therein. Figure 3 is a flow chart illustrating a process which is of substantial value in such measurements. The process of Figure 3 establishes objective benchmark values against which test results for individual patients may...

...both patient and clinician responsesr and
responses are recorded in step 102. In step 104,
 psychological measures are computed and stored based on
the test results recorded in step 102o These
5 psychological measures may be patient condition with
respect to individual psychological variables and/or
overall psychological indices, as previously described.

In step 106, benchmarks are computed with respect to the computed **psychological** measures. Such benchmarks are 10 values bearing a predetermined statistical relationship to the data set representing the **psychological** measures for groups of patient data in the database, Thus, the **process** is repeated by returning to step 102 and obtaining additional test resultsr preferably results for...

...increases. This provides objective and reliable self-validating benchmarks 20 from which inferences regarding individual psychotherapy cases may-be drawn,

For a given data set for a **psychological** measure, the benchmark may for example be established as a certain number of standard deviations a "mental health" population of persons seeking

psychotherapy , a benchmark of normalcy for such a population may be established at a certain number...

...benchmark of normalcy with respect to the mental health index, clinical assessment index, and the psychological variables which comprise them.

One particularly useful output format for data derived from a large database of patient test is a "dose-' response" graph or chart of **psychological** measure versus **psychotherapy** dose, as illustrated in Figures 4 and S. In each graphf the cumulative dose of **psychotherapy** is indicated on the X axis as the number of therapy sessions, and the mean percentiles for the **psychological** measures for data derived from the test of Appendix A is plotted on the Y...

...shows the mean percentiles for the subjective well-being, symptomatic distress, and current life functioning psychological variables, and Figure 4 shows the mean percentiles for mental health index, at intake and after 2,, 4 and 17 psychotherapy sessions.

Such charts provide data indicating varying benchmarks for -expected improvement in **psychological** condition as a result of **psychotherapy**, The "normal" benchmark of about the 84th percentile is also shown. **Psychological** measures for a particular patient— may be plotted on such a graph and compared with...

...illness, by graphing a measure of functioning determined by testing verses time (or dose of psychotherapy), After an initial period 110, a patient will often appear to show a worsening of... ...the illness and effect of the therapy and use such information to control the therapy process,
Thus, Figure 7 is a flow chart illustrating a method for feedback control of psychotherapy provided to a particular patient, which may be performed using the 25. methods and apparatus previously described. In step 130, intake measurements are made for the patient such as by administering the questionnaire of Exhibit A, recording responses, and computing measures such as ...indicate that the patient is sufficiently mentally healthy that therapy is not needed, and the process would terminate in step 140, If therapy is determined to be justified in 5 step...

...is devised in step 134 and implemented in step 136. After a course of therapy, psychological condition is again measured in step 138, and the process returns to step 132 for a determination at that time of whether further therapy is justified. The process continues with devising and applying further therapy and te sting to monitor condition and progress...

...because it is unlikely to be successful and further therapy is therefore unjustifiable, Using this method, the t reatment decisions made by a therapist, case manager, or party paying for the... diagram providing an 5 easily-visualized presentation of a patient's condition and progress. A psychological measurer such as the mental health index, is computed for a patient based on tests taken at various times and plotted against psychotherapy dose, which as indicated may be the number of therapy sessions or their monetary cost...

...deviations above and below the mean, respectively.

Curves 154, 156t and 158 illustrate plots of psychological measures computed for patients AF B, and C.

respectively. In the <code>method</code> of Figure 7f measurements in step 138 of patient B indicate that therapy is ...in step 134 the further therapy devised would be a continuation of the previously-successful <code>method</code>, Measurements of patient C in step 138 indicate that oz / PAGE MISSING UPON FILING  $\ensuremath{\text{my}}\xspace$ .

...she had some family therapy and six years ago she had six months of individual psychotherapy.

The intake diagnosis was: Dysthymia.

Figure 9 is a bar graph showing the percentile scores...

...the patient based on tests administered at various times over a 98 session course of psychotherapy, Figure 11 is a listing of the patient's percentile rank

with respect to the...

...and at
 session 77 of therapy. Such figures may be produced as
 outputs of a system in accordance with the invention,
 o2@ I
 PAGE MISSING UPON FILING
 B, then A. Therapy...

...in database 5 40 of Figure 1.

Figure 13 is a flow diagram of a method of allocating resources supporting therapy among various providers. In steps 180-184r the test-therapy other resource allocation methods may be employed based upon such data.

While the apparatus shown in Figure 1 may be configured as a stand-alone system , it is believed that the invention may have greatest utility when the elements in the...

...more accurate

benchmarks to be computed. Information necessary for each node to carry out the methods of the invention with respect to the local data input at a node is communicated...

...In this wayr each node 194 can input its own data and compute its own psychological measures without the necessity of obtaining large amounts of data and maintaining it resident at...
...from the scope and spirit of the invention.

- @v
APPENDIX "A"
OUTPATIENT THERAPY EFFECTIVENESS
TRACKING SYSTEM
Kenneth L Howard, Ph.D.

Northwestern University Peter L. Brill, M.D.

Intecrra@, Inc.

Robert...THIS.'i.SECUON.IF YOU.@HAVE'COMPLETED..IT.'BEFORE,.":;...-j
1. How much counseling or psychotherapy have you had in the past?
0 None T Three to seven months
a Less...

...One to three months

- 2. How important to you is it to enter counseling or psychotherapy
  at this time?
- (D It is absolutely essential to me.
- Q It is very important...
- ...all.
  - 3. How difficult is it goin2 to be for you to be in counselingJ

psychotherapy (in terms of effort, cost, lost job time, transportation,
other people's opinions, etc.)? (D...

- ...extremely difficult.
  - 0) It will be impossible.
  - 4. How confident are you that counseling or psychotherapy will be successful in helping you with your problem(s)?

    (D Not at all confident...
- ...C4) Very confident.
  - 5. What is your best guess as to how long counseling or psychotherapy will last?
  - (D 1-3 weeks (D 1-2 years
  - 0 4-8 weeks 6...
- ...YOU@'HAVE..'COMPL .M-"fi:!btF0kt C041VIPLEM7 -7: !:7...
  - 6. When you finish counseling or <code>psychotherapy</code> , how well do you feel that you will be Dettina aloncr emotionally and <code>psychologically</code> ? I WILL BE GETTING ALONG.
  - (D Quite poorly; I will be barely able to manage...rate the extent to which each of these problems is a reason for your seeking psychotherapy now by filling in the circle of the appropriate response for each problem.
  - I AM SEEKING PSYCHOTHERAPY BECAUSE OF.

Not At Some Very

- 1. Problems with my spouse or romantic...present time, how much do you feel you have benefitted from this counselin.g or psychotherapy? (Not Applicable if this is yourfirst session with this therapist.) I WOULD RATE MYSELF AS...
- ... Rights Reserved.

# CURRENT LIFE FUNCTIONING

Below are some ways in which people's emotional or **psychological** problems interfere with their functionino. Please read each item carefully and fill in the circle...

...corresponds to the response that best describes your present situation. Please use the following radng system .

```
0 = Not applicable
T = Not at aU
= A little bit
```

6) = Moderately

(D = Quite a bit

6 = Extremely

MY EMOTIONAL/ PSYCHOLOGICAL PROBLEMS INTERFERE WITH MY. Not Not

applicable at all Moderately Extremely
1. Ability to perform...OFTEN YOU HAVE HAD EACH EXPERIENCE LN THE PAST
MONTH, Please use the
followina rating system .

0 Not Al M
(D Once or Twice
(Z Several Times
0 Often

@ Most of...OFTEN YOU HAVE HAD EACH EXPERIENCE IN THE PAST NIONTH.

Please use the followina ratino system .

0 Not At All
(D Once or Twice
0 Several Times
0 Often
0 Most of...

...or dru2 use.
Oc Copyright. IntegraD, Inc. 1992. All Rights Reserved.

CLINICIAN FORM
GENERAL INFORMATIO
PATIENT CODE
THERAPIST CODE
SESSION NUMBER
DATE.

TO BE COMP=D AFTER INITIAL SESSION ONLY PATIENT EMPLOYER CODE...improvement.

- 4. Substantially more improvement.
- 4. How well is your patient getting along, emotionally and psychologically ? 1. Quite poorly; can barely manage to deal with things.
- 2. Fairly poorly; life is...
- ... much the way he/she would like to.

/@/z
APPEMIX "B"
The Howard Outpatient Tracking System
Kenneth L Howard, Ph.D.

Northwestern University Robert J. Lueger, Ph.D.

Marquette University Michael...

...Integra, Inc.

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The Howard Outpatient Tracking System consists of four questionnaires: two Patient Forms and two Clinician Forms. These questionnaires measure the patient's progress in Treatment based on the patient's perspective as well...

...the patient has returned to a normal functional status.

Much of the focus in these questionnaires centers on the patient's functioning in six life areas: family, health, intimacy, social, self...

- ...addition to those found in the Patient Treatment Form. One section consists of six demographic questions such as the patient's marital status, educational background, living situation, etc. Another section is an open-ended question asking the patient- to describe his/her reasons for seeking psychoth mpy. The third section...patients rate the extent to which each problem is a reason for his/her seeking psychotherapy. In the presenting problems section, there are at least three questions for each of the six life areas, which is consistent with our other materials. There...
- ...The four items in this section include dimensions of distress, energy and health, emotional and psychological adjustment, and current He satisfaction. This content sampling includes both positive and negative affect (Diener time, how well do you feel that you are getting along emotionally and
  - psychologically ?
  - 2. At the present time, how energetic and healthy have you been feeling?
  - 3. At...
- ...patient is asked in this section to report to what degree his/her emotional and psychological problems are interfering with his/her life functioning. The 24 items in this scale can be categorized into the six life areas so that there are at least 3 questions per area. The family, intimacy, and social questions inquire about the patient's interactions with others and carrying out his/her responsibilities to...
- ...with him/herself.

CURRENT LIFE FUNCTIONING (reliability = .91)

FAMILY FUNCTIONING: reliability = .75

- $6.\ \mbox{My emotional/}\ \mbox{{\bf psychological}}\ \ \mbox{problems interfere with my interaction}$  with my parents.
- 7. My emotional/ psychological problems interfere %vith my interaction with my siblings.
- 10. My emotional/ psychological problems interfere with my carrying out family responsibilities.

HEALTH AND GROOMING: reliabilirv = .72

- 5. My emotional/ psychological pro6lems interfere with my ability to maintain my personal appearance.
- 11. My emotional/ psychological problems interfere with my participation in physical activities.
- 20. My emotional/psycholocrical problems interfere with my maintaining good health habits.

DITIMATE RELATIONSHIPS: reliability = .67

- 4. My emotional/ psychological problems interfere with my interactions with my spouse/romantic partner.
- 18. My emotional/ psychological problems interfere with my ability to

form or sustain intimate relationships.

19. My emotional/ psychological problems interfere with my enjoyment of sexual activities.

SELF-MANAGEMENTV reliability = .78

- 13. My emotional/ psychological problems interfere with my ability. to function as an independent person.
- 15: My emotional/ psychological problems interfere with my ability to manage -my finances.
- 16. My emotional/ psychological problems interfere with my planning and enjoying leisure time activities.
- 17. My emotional/ psychological problems interfere with my being the kind of person I SOCIAL RELATIONSHIPS: reliability = .82 2. My emotional/psychological problems interfere with my interactions with friends.

Current Symptorn Checklist. Many data collections use a...

...have devised a completely new symptom checklist. From clinical diagnoses based on 140 Structured Clinical Interviews for the DSM-M (SCM), we found that 74.3% of the patients had at as a patient self-report symptom checklist. There are at least three questions for each diagnosis; however, the more prevalent the diagnosis was in our original sample, Elie greater the number of questions pertaining to its area.

CURRENT S Ms (reliability = .93)

AD. TUSTUENT DISORDER: reliability = .77...

...the thera2eutic bond (Orlinsky & Howard, 1987) which has three components.

Empathic resonance relates to the patient 's perception that the therapist understands him/her, and mutual affirmation penains to an open, caring regard between the patient and the therapist.

The Patient Treatment Form has nine items taken from the larger 50-item 7herapeutic Bond Scale (Saunders...is not found in the Clinician Treatment Form. This section consists of an open-ended question asking the therapist to state the patient 's reasons for seeking psychotherapy.

There is also a place in this section for the **therapist** to list the **patient** 's diagnoses, Both forms contain one overall rating of the patient along with ratings in...this patient's level of [e.g., Family Functioning]." A preliminary inspection of ratings from **therapists** on a sample of **patients** indicated that ratings ranged across the available categories for all six domains. The intercorrelations of...Clinic.11 PsyghgiQZy, 22(6), 939

Cowen, E.L. (1991). In pursuit of wellness. American Psychologist 46. 404 Diener, E. (1984). Subjective well-being. Psychological Bulletin a(3), 542 Derogatis, L.R. (1977). SCL-90: Administration and Procedures Manuni-T for the R(evised) Version. Baltimore: Clinical Psychometrics Research.

Dohrenwend, B.S., Dohrenwend, B.P., Link, B., & Levav, 1. (1983). Social functioning of **psychiatric** patients in contrast with community cases in the creneral population. Archives of General Psychiatry, 40...J., Spitzer, R.L., Fleiss, J.L., & Cohen, J.

(1976). The Global Assessment Scale: A procedure for measuring overall severity of psychiatric disturbance. Archives of General Psychiqay U, 766 . Green, R.S., & Gracely, E.J. (1987). Selecting... ...up evaluation. Archives o General Psvchii=, 44, 540 Orlinsky, D.E., & Howard, K.I. (1966). Psychotherapy Session Report. Form P. Chicago. Institute of Juvenile Research. Orlinsk-v, D.E., & Howard, K.I. (1986). A generic model of psychotherapy . J rn,11 o bm Inte=tive ind Eclectic Psychothempy, f2,6 Saunders, S.M... ... Assessment L(4), 323 Viet, C.T., & Ware, Jr., J.E. (1983). The structure of psychological distress and well-being in general populations. Journal of Consulting and Clinical Psychology, 51, 730 Watson, D., & Tellegen, A. (1985). Toward a consensual structure of mood. Psychological Bjdlv@m 21 219 Weissman, M.M. (1975). The assessment of social adjustment. Archives of Genern] Psychiata . (V@HOIDAS) with a miide to its use Geneva: World Health Orcranizad'on. PCY/US93/07969 What Is Claimed Is. J\* A method for measuring the outcome of psychotherapy comprising the steps of. a. measuring a patient's psychological condition with respect to at least one psychological variable; b. administering a dose of psychotherapy; C, measuring the patient's subsequent psychological condition with respect to previously measured psychological variables; and de comparing the patient's subsequently measured psychological condition with the patient's previously measured psychological condition to determine the change therein, is 2\* The method of claim 10, wherein the psychological variables measured include one or more of subjective well being, symptomatic distress, current life functioning, self-esteem, coping, temperament, and attitude. 3e The method of claim 2r wherein the

psychological variables measured include subjective well being, symptomatic distress, and current life functioning.

measuring steps include administering a psychological

40 The method of claim it wherein said

بنع ال

- \* The method of claim 4. wherein said psychological test administering step includes obtaining patient responses to a questionnaire.
- 6e The method of claim 5,,. further comprising the step of computing a mental health index based upon patient questionnaire responses.
- 7\* The method of claim 4. wherein said psychological test administering step includes obtaining clinician responses to a questionnaire.
- 8a The method of claim 7. further comprising the step of computing a clinical assessment index based upon clinician questionnaire responses.
- 9\* The method of claim 1, wherein steps b, c, and d are performed repeatedly.

  10. The method of claim 1, further comprising the step-of comparing the patient's measured psychological condition with benchmark values.
- 11, The method of claim 10, further comprising the steps of measuring the psychological condition of a plurality of persons and computing at least one benchmark value based upon such measurements,
  12, The method of claim 11, wherein the benchmark value computing step includes computing a benchmark value of psychological normalcy,
  . The method of claim 12F wherein said psychotherapy administering step b and said subsequent measuring step c are performed repetitively until the patient's measured psychological condition exceeds the benchmark value of psychological normalcy.
- 14. The method of claim 11, wherein the benchmark value computing step includes computing a benchmark psychotherapy dose-response value.
- 15. The **method** of claim 14, wherein steps b and 10 c are performed repetitively, further comprising the step of comparing the patient's measured **psychotherapy** dose response with a benchmark value of dose response.
- 16. A method of administering a program of psychotherapy comprising the steps of repetitively alternately administering a dose of psychotherapy to a patient and measuring the psychological condition of the patient for each patient in a group of patients; storing data representing the psychotherapy doses administered and the measurements of psychological condition; and computing changes in psychological condition per psychotherapy dose based upon the stored data.
- 17\* A method according to claim 16, wherein the change in psychological condition per dose is computed for each patient in a group of patients.

#### PAGE MISSING...

...apparatus of claim 21 wherein the database comprises.
data corresponding to patient responses to a questionnaire; and data corresponding to clinician responses to a questionnaire.

24, The apparatus of claim 22, wherein the 10 processing means further comprises means for...

...claim 24, wherein the processing means further comprises means for computing a benchmark value of **psychological** normalcy from the data in the database.

- 26. The apparatus of claim 25, wherein the processing means further comprises means for computing a benchmark psychotherapy dose-response value, 27, The apparatus of claim 26, wherein the processing means further comprises means for comparing the patient's measured psychotherapy dose response with a benchmark value of dose-response.

## Claim

... 93);

original claims 1-27 replaced by amended claims 1-34 (8 pages)] is A method for administering psychotherapy to a patient and measuring the outcome thereof comprising the steps of: a. administering a psychological test to a patient and measuring the patient's psychological condition with respect to at least one psychological variable; and repeatedly be administering a dose of psychotherapy to the patient; co administering the psychological test to the patient and measuring the patient's subsequent psychological condition with respect to said at least one previously measured psychological variable; and de comparing the patient's subsequently measured psychological condition with the patient's previously measured psychological condition to determine the change therein, wherein said psychotherapy administering step includes determining a process of psychotherapy to be administered in accordance with the measured psychological condition of the patient and compu" %ed changes therein, and administering psychothe: apy in accordance with said determined processr whereby the psychotherapy administration process is optimized by feedback control on the basis of psychological condition measurements.

\* The method of claim lo, wherein the psychological variables measured include at least one of subjective well being, symptomatic distress, current life

functioning, self-esteem, coping, temperament, and
attitude.
3e The method of claim 2o, wherein the
 psychological variables measured include subjective well

being, symptomatic distress, and current life functioning.
4a The method of claim 1, wherein said
10- psychological test administering steps includes obtaining patient responses to a questionnaire.

5\* The method of claim 4, further comprising the step of computing a mental health index based upon patient questionnaire responses.

6 The method of claim 1, wherein said

psychological test administering steps includes obtaining
clinician responses to a questionnaire.

7e The method of claim 6, further comprising
the step of computing a clinical assessment index based
upon clinician questionnaire responses.

8e The method of claim 1, further comprising
the step of comparing the patient's measured psychological
condition with benchmark values.

o The method of claim 8r further comprising

o The **method** of claim 8r further comprising the steps of measuring the **psychological** condition of a plurality of persons and computing at least one of said benchmark values based upon such measurements.

- 10 The method of claim 9, wherein the benchmark value computing step includes computing a benchmark value of psychological normalcy.
- 11 The method of claim 10, wherein said psychotherapy administering step b and said subsequent measuring step c are performed repetitively until the patient's measured psychological condition exceeds the benchmark value of psychological normalcy.
- 12 The method of claim 9, wherein the benchmark value computing step includes computing a benchmark psychotherapy dose-response value,
- 13 The method of claim 12, further comprising the step of comparing the patient's measured psychotherapy dose response with a benchmark value of dose response, wherein said psychotherapy administering step includes determining said process of psychotherapy to be administered in accordance with said dose response comparison.

14e A method of administering a program of psychotherapy comprising the steps of repetitively alternately administering a dose of psychotherapy to a patient and measuring the psychological condition of the patient for each patient in a group of patients; storing data representing the psychotherapy doses administered and the measurements of psychological condition; computing changes in psychological condition per psychotherapy dose based upon the stored data; and administering psychotherapy to patients in the group in accordance with the computed changes in psychological condition per psychotherapy dose.

150 A method according to claim 14F wherein the

- 10 change in psychological condition per dose-is computed for each patient in the group of patients.

  16e A method according to claim 15, further comprising the step of allocating psychotherapy among the patients in the group in accordance with the computed change in psychological condition per dose for each patient in the group,
- 17 A method according to claim 14, wherein the change in psychological condition is 'computed for each psychotherapy provider in a group of psychotherapy providers who has performed said administering step. 18\* A method according to claim 17r further comprising the step of allocating psychotherapy resources among the psychotherapy providers in the group in accordance with the computed change in patient 25 psychological condition per dose achieved by each provider in the group. 19 An apparatus for measuring the psychological condition of a patient to facilitate determining outcome of patient psychotherapy, comprising: input means for entering psychological test data relating to a patient's psychological condition with respect to at least one psychological variable; a memory including a database for storing the entered data; and processing means for ...
- ...mental health index from the entered data, said mental health index representing the patient's psychological condition with respect to said at least one psychological variable.
  - 20 The apparatus of claim 19, wherein the psychological variables measured include at least one of subjective well being, symptomatic distress, current life functioning...
- ...apparatus of claim 19 wherein the database comprises:
  data corresponding to patient responses to a questionnaire; and data corresponding to clinician responses to a questionnaire.
  - 22 The apparatus of claim 20, wherein the processing means further comprises means for computing...
- ...22, wherein the
   processing means further comprises means for computing a
   5 benchmark value of psychological normalcy from the data in
   the database,
  - 24 The apparatus of claim 23t wherein the processing means further comprises means for computing a benchmark psychotherapy dose-response value.
  - 25 The apparatus of claim 24, wherein the processing means further comprises means for comparing the

patient's measured psychotherapy dose response with a benchmark value of dose-response. 28 Apparatus for measuring the psychological condition of a patient comprising: means for receiving psychological test data relating to at least one patientf said test data including data relating to at least one psychological variable, and for presenting the received data as digital signals; means for ...said digital signals and selecting therefrom the signal portions relating to said at least one psychological variable; means for computing a single-valued quantityr representing the psychological condition of a patient with respect to said at least one psychological variabler from said selected digital signals; and means for comparing said single-valued quantity with a predetermined benchmark quantity representing a benchmark psychological condition to obtain an indication of the patient's psychological condition with respect to said benchmark condition. 29 The apparatus of claim 26, wherein said...

- ...of said various times to
   obtain an indication of the change in the patient's
   psychological condition over the time interval.
   . 30. The apparatus of claim 27, wherein said
   comparing means...
- ...valued quantity with a predetermined benchmark quantity representing a benchmark time rate of change of psychological condition, to obtain an indication of the time rate of change in the patient's psychological condition with respect to said benchmark rate.
  - 31 The apparatus of claim 26, wherein said test data includes data relating to a plurality of psychological variables, said examining and selecting means includes means for selecting from said digital signals the portions relating to each of said plurality of psychological variables, and said computing means includes means for computing said single-valued quantity with respect...
- ...digital signals.
  - 33 The apparatus of claim 30, wherein said predetermined benchmark quantity represents a psychological condition of normalcy.
  - 34 The apparatus of claim 30, wherein said test data includes data...
- ...plurality of patients, and said predetermined benchmark quantity represents a time rate of change of psychological condition.

35/3,K/61 (Item 61 from file: 349) DIALOG(R) File 349: PCT FULLTEXT

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APPARATUS AND METHOD FOR MOVEMENT COORDINATION ANALYSIS APPAREIL ET METHODE D'ANALYSE DE LA COORDINATION DES MOUVEMENTS

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APPARATUS AND METHOD FOR MOVEMENT COORDINATION ANALYSIS APPAREIL ET METHODE D'ANALYSE DE LA COORDINATION DES MOUVEMENTS

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Fulltext Availability: Detailed Description

Claims

English Abstract

Method and apparatus for evaluating among the trunk and limbs of the body the distribution of...

French Abstract

La presente invention concerne une methode et un appareil permettant d'evaluer, outre le tronc et les membres du corps, la...

Detailed Description

1

DESCRIPTION

Technical Field

This invention relates generally to medical diagnostic devices and methods , and in particular to diagnostic tools for selectively evaluating the distribution and extent of disorders...can be unequally distributed between sensory and motor aspects of posture and movement control

Nervous system disorders which impair the brain centers and associated efferent neural pathways controlling activities of the body musculature affect the motor components of posture and equilibrium control...an equilibrium position following perturbations therefrom

Disruption of the brain centers and associated afferent neural pathways from peripheral receptors and muscles, in contrast, disrupts ability to receive and correctly interpret incoming...see for example Kendal and Schwartz, 1981; Chapters 24, 27, and

Presently available clinical methods do not selectively assess both the type and the distribution of sensory and motor disorders...

...muscle produces a brief stretch input exciting stretch receptor organs and, by way of spinal pathways, motor units of the perturbed muscle. Since muscles isolated from I central brain efferent controls tend...is asked to sense the position of a limb as it is passively moved. This method determines the extent of conscious position sense. In the control of posture and equilibrium, however...

...reliably used to determine the nature and extent of sensory impairment in the posture control system

(4) Peripheral nerve conduction velocities: There are a

number of ...for quantifying the speed of signal conduction within the peripheral motor and sensory nerves. These techniques can determine the distribution and extent of nerve damage contributing to an inability to contract...

...nerve conduction velocities is useful to rule out the possibility of peripheral nerve involvement. This technique, however, cannot separate and characterize sensory and motor impairment due to spinal cord and central...sensory and motor components of posture and equilibrium

In addition. to the standardized clinical assessment methods, devices have been developed to quantify measures human postural sway and postural movements. Several manufacturers currently produce fixed forceplate systems (Kistler Corporation, 75 John Glen Drive, Amherst, New York, 14120; Advanced Medical Technology, Inc., 141...Njiokiktjien and de Rijke, 1972; Japanese authors)

Disclosure of the Invention
The present invention provides methods and devices for evaluating among the trunk and limbs of the body the distribution two...independently impair functions in some body and limb parts

The present invention incorporates the following methods: (1) The subject assumes a position of equilibrium while at least two body or limb...standing or seated on the support surface

Description of Specific Embodiments
Recent investigations describe platform systems which, in addition to measuring surface reaction forces, are movable by hydraulic or electric motor...whereas normals respond symmetrically with the two feet. These authors, however, have not developed a system for categorizing normal and abnormal postural movements ...performance of standing and walking posture and movement control tasks. A computerized infa-red video system allows the positions of a number of markers to be plotted in space (Wattsmart system by Northern Digital Ltd., 415 Phillip Street, Waterloo, Ontario, Canada N2L 3XQ)

According to methods described in the inventor's previous application serial number 873,125, filed June 11, 1986...surrounding his field of view with a sway-referenced visua'L enclosure, however, the above procedure can be repeated in the absence of useful visual orientation information

The ability of the...June 11, 1986 as well as using devices described irn the literature. In one such method, the distribution of vertical and horizontal -forces exerted by each supported body part against the...transducers to the body (Nashner, 1970 and 1971) or optically using photographic or video recording techniques (for example Watts-mart System)

In addition to selectively evaluating ability to receive and interpret support surface inputs from body...able to receive and interpret support surface inputs from the one body or limb part

Methods for quantitatively assessing the subject's ability to execute the coordinated postural movements necessary to...

...serial number 408,125,
filed August 16, 1982, now abandoned. That application
30included the following method disclosures for eliciting
corrective postural movements in a subject maintaining an
assumed equilibrium position: (1 previous application also included the
following method disclosures for computing parameters of
coordination related to the subject's corrective postural
movements: (1...t

'r parameters for each body part and each direction of perturbation. I develop a system for categorizing active force responses which uses the latency and strength parameters for differing body...

...and perturbation ' directions

In parent application serial no. 408,184 there was described a second method for computing "Timing" and "Structure" parameters of postural movement coordination during corrective postural movements. This method uses measures of electromyographic (EMG) ...and horizontally displace

the optional hand-held manipulandum (19)

In a preferred embodiment of a method according to the present invention, the subject (10) assumes an erect standing position in equilibrium...accordance with a protocol implemented by the program means which I call the Sense Test Procedure (STP), spontaneous changes in the AP stance orientation angle are measured and then transmitted to system for catagorizing the subject's ability to use support surface inputs from each leg is...

...age-matched normal individuals performing under the same
- 4 conditions. Comparisons are made using statistical
 methods well-known in the prior art for identifying
 significant-differences. The categories for classifying
 abnormal...in center of mass displacement
 position over time. The time course of displacements under
 Test Procedure X for condition 1 is shown in 30, for
 condition 2 in 31, for condition...ical of a Category B (unilateral
 abnormal) individual

The time course of displacements under Test Procedure X for condition 1 is shown in 40, for condition 2 in 41, for condition...by a protocol, implemented by the .15 program means, which I call the Motor Test Procedure (MIP). Brief horizontal, linear displacements of the support surface in one direction perturb the position...direction, it is then possible to determine the distribution of postural movement abnormalities

A system for categorizing a subject's ability to execute effective postural movements with the two legs...values between the two legs, two directions, and subject populations can be determined-by statistical methods well-known in the prior art 30 35

M= TEST SURFACE REACTIE FORCES OF T...for age-matched normals
TABLE II
CATEGORIES FOR NORMAL AND ABNORMAL
In accordance with my system for categorizing normal and abnormal postural movements, subjects are placed in Latency Category A whose...side B) sway, the relative strength of. such muscle responses, and the timing thereof By-techniques of

In accordance with my system for categorizing normal and abnormal postural movements, subjects are placed in Latency Category A whose...side B) sway, the relative strength of. such muscle responses, and the timing thereof. By- techniques of graphic analysis, or direct computation from the underlying signal traces, this quantifying data may...the reverse sequence of antagonist activation was again observed in muscles of the spastic leg

Methods of the present invention for quantifying, separately -in the less-involved and in the spastic ...antagonist co-activation was greater

It is possible to combine the Sense and Motor Test

Procedures such that ...execute postural movements in the other leg can be selectively assessed. This combination of test procedures is useful for identifying more subtle forms of abnormal sensory processing and movement coordination in...

...within the normal range (Category N) when both legs receive useful support surface inputs. These procedures are combined by repeating the Motor Test Procedure for Sense Test Procedure conditions 3 and 4. (Note that the Motor Test Procedure is normally run under Sense Test Procedure condition 1 only.) For each repetition of the Motor Test Procedure, methods identical to those described in Figs. 6 and 7 and Table II are repeated to...

...categories as a function of the sensory test condition

For those subjects whose Motor Test  $\mbox{\bf Procedure}$  results show no asymmetries in Latency (category A or N) or Strength (category N) parameters...

...distribution of support surface inputs. Sensory Distribution categories are based on differences in Motor Test Procedure Latency and Strength categories between trials run under Sense Test Procedure conditions 1, 3, and 4. Again, statistical methods well-known in the prior art can be used to identify significant differences in parameter values. A system according to the present invention for establishing categories for normal and abnormal sensory distribution is shown in Table III

30
35
DISTRISUICV LATENCY AND STRENGTH CATEGORIES
CATEGORIES MOTOR I T PROCEDURE
Condition 1 Conaiton 3 Condition 4
A. Abnormal L amp; S = A, N L or...asymmetries in Latency and Strength (Motor Test categories A or N) when the Motor Test
Procedure is applied under sensory condition 1 but shows either one or a combination of lateral...

- ...asymmetries in
  Latency and Strength (Motor Test categories A or N) when
  the Motor Test **Procedure** is applied under sensory condition
  and 3 but shows either one or a combination of lateral
  and directional asymmetries when the same **procedure** is
  applied under sensory condition 4. A subject is--placed in
  category C' (sensory distribution...
- ...asymmetries in Latency and Strength (Motor Test categories A or N) when the Motor Test Procedure is applied under sensory condition 1 and 4 but shows either one or a combination of lateral and directional asymmetries when the same procedure is applied under sensory condition 3. Finally, a subject is placed in category N (normalcategories A or N) when the Motor Test Procedure is applied under sensory condition 1, 3, and 4

Some subjects may be unable to...

...with a gain of unity. Therefore, it is 30sometimes- necessary to modify the Sense Test Procedure with the sway-reference gains reduced from unity to a fraction

This modification provides the...the sway-reference gains above unity
It is also possible to modify the Sense Test **Procedure** such that a simpler device can be used to identify normal and abnormal parameters for...compliant element and thereby rotate the surface

It is possible to modify the Motor Test Procedure so

that ability to execute postural movements is assessed while the subject relies on only...torque) in the leg supported by the shortened support surface. By repeating the Motor Test Procedure with one foot at a time supported by a shortened support surface and by determining Latency and Strength parameter values for each leg, it is possible to re-apply the system for establishing categories for normal and abnormal ...movement control described in Table II

It is further possible to modify the Motor Test

Procedure so that ability to execute postural movements
while the subject relies on one leg at...resulting postural movements
produced by the supporting leg
are measured and categorized using the same system for
categorizing normal and abnormal postural movement control
described in Table II

A-protocol implemented by the program means which I call the In-Place Stepping Motor Test Procedure includes the following procedures: (1) The subject assumes a standing position of-equilibrium on two independent support surfaces. (2...displacement. (5) The properties of the resulting postural movement back to equilibrium are determined by methods similar to those described for the Motor Test Protocol. (6) Steps 4 and 5 are...and Strength parameter values are determined for each leg and for each displacement direction using methods similar to those described for the Motor Test Protocol. (S) Postural movements of the left...

...according to criteria described in Table II

it is possible to modify the Motor Test Procedure so that the ability of the subject to execute postural movements in the two legs...the left to right changes in position of the vertical force center using the same methods as with the records of front to back change in position of the vertical force center shown in Figure 6

It is possible in the .Motor Test Procedure to use alternative means to produce brief anteroposterior and lateral displacements of the subject from...in instances such as described in this paragraph, the coordination parameters can be determined using methods similar to those described in connection with the horizontal, linear, displacement perturbations

it will be...be considered as postural muscles in appropriately created tests in a fashion analogous with the methods described above

25 30 35 APPENDIX - LIST OF REFERENCES 1. Kandel, E.R., Schwartz, J...

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Claim

What is claimed is:

limb part at a time the following substrates...
...part for
 re-establishing the assumed equilibrium position following
 a brief transient perturbation therefrom, such method
 comprising:

1. A method for selectively assessing in one body or

A. placing the subject on a plurality of independent support surfaces and having the...su=ort in response o the brief

transient perturt

t c ns;

G. repeating procedures C, D, E, and F with differing portions of the support surfaces fixed and moving...and for executing postural movements against the support surface based on the measured quantities.

.-k- method according to claim 1, wherein step A 25includes the additional step of obstructing the subject's vision.

- 3. A method for selectively assessing in one supporting lea at a time the following substrates of standing...
  ...for re-establishing an assumed standing equilibrium position following a brief transient perturbation therefrom, such method comprising:
  A. standing the subject with one foot on each of two independently movable support...of leg muscles providing postural support in response to the brief transient perturbations;
  G. ,repeating procedures C, D, E, and F with each of the four combinations of the two support...for executing postural movements against the support surface based on the measured quantities.
  - 4. A method according to claim 3, for selectively assessing in one supporting leg at a time the...wherei step A includes the additional step of obstructing the subject's vision.

5. A method , using actively movable support surfaces, for selectively assessing in one supporting leg at a time...

...position in the
 anteroposterior plane of motion (hereinafter termed AP
 stance support surface inputs), such method comprising:
 A. standing the-subject with ...standing
 equilibrium position (hereinafter ter-red AP stance
 orientation angle);
 C. performing the Sensory Test Procedure as
 follows:Cl. fixing both support surfaces
 C2. recording the extent of spontaneous changes
 in...of the support
 surfaces rotated in relation to the AP stance
 orientation angle

6. A method , using passively compliant support surfaces, for selectively assessing in. one supporting leg at a time...

...position in the anteroposterior plane of motion
 (hereinafter termed AP stance support surface inputs), such
 method comprising:
A. standing the subject with one foot on each of
 two adjacent support surfaces...least one quantity related to the
 AP stance orientation angle;
C. performing the Sensory Test Procedure as
 fc
 or s:.
Cl. fixing both support surfaces
C2. recording the extent of spontaneous...support
 surfaces
 compliant to changes in angle about
 the support surface rotation axis

- 7. A method for selectively assessing in one supporting leg at a time the ability to utilize support establishing an assumed standing equilibrium position following a brief transient perturbation therefrom, such method comprising:

  A. standing the subject with one foot on each of two independently movable support...the contractile activities of a plurality of leg muscles providing postural support;

  T. repeating procedures C, D, and E with each of the four combinations of the two support surfaces...executing effective postural movements against the support surface based on the measured quantities.
- 6. A method for selectively assessing in one supporting leg at a time the ability to-execute postural stance orientation angle, such

method comprising:

A. standing the subject with one foot on each of two adjacent support surfaces...

...forward and backward in the
 25anteroposterior direction-of motion;
B. performing the AP Motor Test Procedure as
follows:
B1. perturbing on a brief transient basis in the

forward direction the subject...

- ...surface (r
   termed AP movement forces) in response to the
   brief forward perturbations;
   B3. repeating procedures B1 ...and substantially similar to one
   another for
   both legs and both perturbation directions
  - 9. A method , according to claim S, for selectively assessing in one supporting leg at a time the backward by displacing the support surface forward on a brief transient basis.
  - 10. A **method**, according-to claim 8, for selectively assessing in one supporting leg at a time the...push in the posterior direction against the handle on a brief transient basis.
  - 11. A method, according to claim 8, for selectively assessing in one supporting leg at a time of...support surface displacement while the subject bears full weight with the other leg.
  - 12. A method, according to claim 8, for selectively d assessing in one supporting leg at a time...against 30the handle rile the subject bears full weight with the other leg.
  - 13. A method for selectively assessing in one supporting leg at ...center of body mass in the lateral direction (hereinafter termed lateral stance orientation angle), such method comprising:
  - A. standing the subject with one foot on each of two adjacent support surfaces; B. performing the Lateral Motor Test Procedure as follows
  - B1. perturbing on a brief transient basis in the leftward direction the subject...surfaces (hereinafter termed lateral movement forces) in response to the brief leftward perturbation;
  - B3. repeating procedures B1 and B2 with brief transient rightward perturbation of the assumed equilibrium position;
    C. determining...Category N whose Strengths are substantially similar for leftward and rightward perturbation directions
  - 14. A method, according to claim 13, for selectively assessing in one supporting leg at a time ...equilibrium rightward by a brief waveform of leftward displacement of the support surface.
  - 15. A method, according to claim 13, for selectively assessing in one supporting leg at a time the...pull in the rightward direction against the handle on a brief transient basis.
  - 16. A method , according to claim 13, for selectively

assessing in one supporting leg at a time of...surface displacement whih  ${\tt e}$  the subject bears full weight with the other leg-.

- 17. A method, according to claim 13, for selectively assessing in one supporting leg at a time of...against the handle while the subject bears full weight with the other leg.
- 18. A method for selectively assessing in one supporting leg at a tire the ability to utilize support perturbation in the AP stance orientation angle produced by support surface displacement, such method corprising: A. standing the subject with one foot on each of twc independently movable support... ...to the AP stance orientation angle; C. performing the combined AP Sensory and Motor Test Procedure as follows: Cl. rotating on a continuous basis a combination of the two support surfaces...each leg against its supporting surface in response to the brief forward perturbations C4. repeating procedures C1, C2, and C3 with each of the four combinations of the two support surfaces...each leg against its supporting surface in response to the brief forward perturbations CE. repeating procedures C4, C5, and C6 with each of the four combinations of the two support surfaces...orientation angle is in Latency Categories A or N and Strength Category N.
  - 19. A method for selectively assessing in one su porting leg at. a tine the ability ...the AP stance orientation angle; T
    C. performing the combined AP Sensory and Motor Test Procedure as follows:
    Cl rotating on a continuous basis a combination of the two support surfaces brief forward perturbations C3.repeating procedures C1, C2, and C3 with each of the four combinations of the two support surfaces...each leg against its supporting surface in response to the brief backward perturbations C7. repeating procedures C4, C5, and C6 with each of the four combinations of the two support surfaces...orientation angle is in Latency Categories A or N and Strength Category N.
  - 20. A **method** for determining the extent of a subject's independent ability, following a brief perturbation, to...
- ...by coordinating the
   contractions of muscles providing postural support for the
   position-in equilibrium,' such method comprising:
   ...least one of the temporal
   order, amplitude or distributional relationship of such
   contractions.
  - 21. A method for determining a subject's independent

ability to maintain an upright standing position in equilibrium...

...trunk muscles in response to-linear displacements in the
position of the support surface, such method comprising:
A. standing the subject on a support ...axis") and having him face along
a horizontal
axis;
B. measuring, using a electromyographic
recording technique, the contractile activity in a selected
group of leg and trunk muscles;
C. displacing the...

... the contractions of muscles providing postural support as follows: Dl. generating a signal (hereinafter terns " processed EMG signal") related to the instantaneous amplitude of each EMG signal by full-wave rectifying signal; D2. measuring the latencies of any increases and decreases in amplitude of the  $\ensuremath{ ext{processed}}$   $\ensuremath{ ext{EMG}}$ signal of each muscle following onset of the displacement using in each case a statistical criterion to determine when the amplitude level of each processed EMG signal first deviates from that recorded in a predetermined prior time interval; D3. computing coefficients of correlation for the processed EMG signals between selected pairs of muscles during selected brief intervals of. time following onset...values of an age-matched normal population of subjects undergoing the same motions.

- 22. A method according to claim 21 for determining a subject's independent ability to maintain an upright...the subject face in the direction of the horizontal support surface displacement axis.
- 23. A method according to clair
  22, for identifying
  subjects who are abnormal with respect to the ability...

...values
which deviate significantly from the normal
population according to a statistical
criterion.

4.6

- 24. A method according to ...the subject face at right angles to the horizontal support surface displacement axis.
- 25. A method according to claim 24, for identifying subject who are abnormal with respect to the ability...deviate significantly from those of the normal population according to a statistical criterion.
- 26. A method according to clair 22, for determining a subject's independent ability to maintain standing position...the stance orientation of the subject and the

inclination of the support surface.

27. A method according to claim 26, for identifying subjects who are abnormal with respect to the ability...deviate significantly from those of the normal population according to a statistical criterion.

28. A method according to claim 20, for determining the extent of a subject's independent ability to...such axis; and wherein step B includes the further step of measuring, using an electromyographic technique, the contractile activity in a selected group of leg and trunk muscles; and wherein step C further includes
C1. generating a signal (hereinafter termed
"processed EMG signal"); related to the instantaneous amplitude of each EMG signal by full-wave rectifying...

...the signal;
C2. measuring the latencies of any increases and decreases in amplitude of the processed EMG signal ...using in each case a statistical criterion to determine when the amplitude level of each processed EMG signal first deviates from that recorded in a predetermined prior time interval;
C3. computing coefficients of correlation for the processed EMG signals between selected pairs of muscles during selected brief intervals of time following onset...values of an age-matched normal population of subjects performing the same task.

- 29. A method according to claim 2E for identifying subjects who are abnormal with respect to the ability...from those of the normal population according to a statistical criterion of significance.
- 30. A **method** for determining a subject's independent ability to maintain position in equilibrium by coordinating contractions...

...of arm
 muscles while performing certain arm motions with respect
 to an external object, such method comprising;.
 A. - placing the subject on a support surface in a
 position of equilibrium;
 B...

...a handle placed within
his reach, with one hand;
C. measuring, using an electromyographic recording
 technique, the contractile activity in a selected group of
leg, trunk and ...E. analyzing the subject's muscle responses as
follows:
El. generating a signal (hereinafter termed
 "processed EMG signal") related to the
instantaneous amplitude of each EMG signal by
full-wave rectifying...

...the signal;

- E2. measuring the latencies of any increases and decreases in amplitude of the **processed** EMG signal of each muscles following onset of the handle displacement (or signal to move predetermined prior time interval:
- E3. computing coefficients of correlation for the processed EMG signals between selected pairs of muscle during selected brief intervals of time following onset subjects performing the same task.
- 31. A method according to claim 30, wherein step A includes the further step of seating the subject...
  ...and forth in the anteroposterior direction-with respect to the subject's orientation.
  - 32. A **method** according to claim 30, wherein step -A includes the further step of seating the subject...the handle back and forth in the anteroposterior direction upon perceiving such signal.
  - 34. A method according to claim 32, wherein step D includes the ...the handle back and forth in the lateral direction upon perceiving such signal.
  - 35. A method according to claim 30, wherein step A includes the further step of having the subject...anteroposterior direction with respect to the subject's orientation upon perceiving such signal.
  - 36. A method according to claim 30, wherein step A includes the further step of having the subject...of motion with respect to the subject's orientation upon perceiving such signal.

    37. A method according to claim 30, wherein step A includes the further step of having the subject such signal.
  - 38. A method for determining a subject's independent ability to maintain an upright seated position in equilibrium...
- ...trunk muscles in response to linear displacements in the position of the support surface, such method comprising: A. seating the subject on a support surface, independently displaceable along a horizontal axis (hereinafter termed the "horizontal support surface displacement axis"); B. measuring, using an electromyographic recording technique, the contractile activity in a selected group of leg and trunk muscles; C. displacing the...the contractions of muscles providing postural support as follows D1. generating a signal (hereinafter termed " processed EMG signal") related to the instantaneous amplitude of each EMG signal by full-wave rectifying... ...the signal; D2 measuring the latencies of any increases and decreases in amplitude of the processed EMG signal of each muscle following onset of the

displacement or signal to move the D3 computing coefficients of

correlation for the **processed** EMG signals between selected pairs of muscles during selected brief intervals of time following onset...

- ...values of an age-matched normal population of subjects performing the same tasks.
  - 39. A **method** according to ...the subject face along the direction of the horizontal support surface displacement axis.
  - 40. A method according to claim 38, wherein step A further includes the step of having the subject...

```
Set
        Items
                 Description
                 PSYCHIAT? OR PSYCHOSOMAT? OR PSYCHOLOG? OR PHYSIC?()THERAP?
S1
       290411
              OR PSYCHOTHERAP? OR PSYCHO() THERAP? OR CHIROPRACT? OR BIOFEE-
             DBACK? OR BIO() FEEDBACK?
S2
                 ENERG? (2N) (HEALTHCARE OR HEALTH() CARE OR MEDICIN?) OR NEUR-
             OMODULAT? OR NEURO()MODULAT? OR NMT OR ACUPRESS? OR ACU()PRES-
S3
      2880986
                 PATHWAY? OR PATH()(WAY OR WAYS) OR QUERIE? OR QUERY? OR QU-
             ESTION? OR INTERROGAT? OR INTERVIEW?
S4
                 (MUSCLE() RESPONSE) (5N) (TEST? OR RATE? ? OR RATING OR ASSES-
             S? OR APPRAIS? OR EVALUAT? OR MEASUR? OR DETERMIN? OR ESTIMAT?
              OR GAUG? OR DIAGNOS? OR MONITOR?) OR MRT
S5
                 (PATIENT? OR SUBJECT? ?) (10N) (PRACTITIONER? OR THERAPIST?)
                 DNFT OR DIRECT() (NONFORCE OR NON() FORCE) () TECHNIQUE OR MUS-
S6
          175
             CLE()TEST? OR (ORING OR O()RING)()TEST? OR LEG()LENGTH()TEST?
             OR PHYSIC?()STIMULAT?
S7
                 (SEMANTIC? OR CLINIC?) (3N) ALGORITHM?
          112
                 (CONCIOUS? OR SUBCONCIOUS?)()LEVEL?
S8
S9
                 (OPTIM? OR CORRECT?)(2N)(COMMAND()STATEMENT?) OR (VERBAL? -
             OR NONVERBAL?) () CORRECT? () COMMAND?
S10
        26541
                 DYSFUNCTION? OR AUTONOMIC?() (FUNCTION? OR RESPONSE?)
S11
      2371343
                 POSTUR? OR POSITION?
                 (PATHWAY? OR PATH()(WAY OR WAYS))(3N)(PERNICIOUS? OR SENSO-
S12
           99
             RY? OR MOTOR? OR ALLERG? OR INFECT? OR EXOGENOUS? OR TOXIN? OR
              MORPHIC?)
                METHOD? ?
S13
       491512
                SYSTEM? ?
S14
      3787032
S15
      2268729
                 PROCESS??
S16
       493342
                 PROCEDURE? ?
S17
       262408
                TECHNIQUE? ?
      1513470
S18
                 TREAT?
         9082
S19
                CURING
S20
         4146
                CURATIV?
S21
      2398839
                HEAL?
S22
       575804
                CORRECT???
S23
        82921
                CURE
S24
        11931
                CURES
S25
        21214
                CURED
S26
        52620
                REMEDY?
S27
        39627
                REMEDIE?
S28
                 S1:S2 AND S3 AND S4
                 S1:S2 AND S3
S29
        77143
S30
         2849
                 S29 AND S18:S27(5N)S13:S17
S31
                 S30 AND S4
            0
S32
           86
                S30 AND S5
                 S30 AND S6:S9
S33
            5
S34
                S30 AND S12
            1
                 S30 AND S10:S11
          728
S35
S36
                 S35 AND S3(5N)S5
            8
S37
          101
                 S28 OR S32:S34 OR S36
S38
            0
                 S30 AND LESLIE (2W) FEINBERG
           23
                 S29 AND FEINBERG
S39
            2
                 S39 AND LESLIE
S40
S41
            0
                 S29 AND LESLIE (2W) FEINBERG
          123
                 S37 OR S39:S40
S42
S43
          119
                 S42 AND PY<2004
          106 / RD (unique items)
S44
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30835886 (USE FORMAT 7 OR 9 FOR FULLTEXT)

What's the alternative, doctor?

SECTION TITLE: FEATURES

DEKKER Diana

DOMINION POST , 2 ed, p3

August 23, 2003

JOURNAL CODE: WTDP LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 2110

## (USE FORMAT 7 OR 9 FOR FULLTEXT)

... a closing of the gap between medical and alternative models has been predicted, but though chiropractors and some acupuncturists are now able to offer their services paid for by ACC, there...it's good if people can work together. I work with other doctors and medical practitioners and medical doctors refer patients to me. Doctors don't sit there with a blind eye."

Dr Shelton graduated in...

... every cell tissue and organ in different permutations in different individuals. Recognised as a holistic **health** care **system** by the World **Health** Organisation.

#### Chiropractic

Founded in 1896 in the United States, in Iowa, literally meaning "practice by hand". It...and intuition.

Kinesiology

Identifies imbalances in the body said to be manifested through muscles and treats them with a range of procedures.

Medical herbalism

The therapeutic use of plants to treat disease.

Naturopathy

A way of life...

... the belief that language can achieve specific outcomes such as adopting or eliminating certain behaviours.

# Psychotherapy

Recognises the place of the past in shaping experience and seeks to enhance self-awareness...

...those arising from birth and early life experiences.

Acupuncture

Precise needling of points along energy pathways , known as meridians, to release blocked energies and restrain over-exuberant energies.

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18137633 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Mind/Body Medicine Offers New Hope: Taris 5-Element Homeopathic Remedies Bridge Gap Between Physical & Emotional Health

PR NEWSWIRE

August 02, 2001

JOURNAL CODE: WPRW LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 465

#### (USE FORMAT 7 OR 9 FOR FULLTEXT)

... the release of the new Taris 5-Element homeopathic line and emotional/physical meridian response questionnaire developed by leading acupuncturist, Dr. T. Aristotle.

Chronic depression, unresolved grief, anger, excessive worry or...

- ... alternatives." The Taris 5-Element homeopathic remedies (fire, earth, metal, water and wood) present health **practitioners** and their **patients** with more options by merging Asian medicine and European based homeopathic formulas.
- ... physical health originated approximately 5,000 years ago in ancient China and Europe and these **health** conditions were **treated** using acupuncture **techniques**. This set the foundation for the development of the Taris 5-Element homeopathic remedies and 5-Element **questionnaire**.

The homeopathic remedies address emotional and physical meridian reflexes associated with the 5-element system of healing. Practitioners from health fields such as psychology, dentistry, chiropractic, medical, acupuncture and naturopathy are easily integrating the Taris 5-Element homeopathic remedies into their...

... Aristotle's research and clinical observations also led to the development of a ten-page questionnaire to evaluate a patient's acupuncture meridian system and how it relates energetically to their physical and emotional status. Patients answer questions relating to taste preferences, dislikes, emotional tendencies and physical ailments. Practitioners can then easily tabulate and review patient responses and recommend the appropriate homeopathic remedy. These questions originated from historical references in ancient Chinese medical textbooks.

Aesclepious International is a company that...

... lectures internationally on new techniques in alternative medicine. He is a licensed acupuncturist, doctor of chiropractic and practices in Scottsdale, Arizona and Beverly Hills, California. For more information about Taris 5-Element homeopathy or questionnaire, contact Aesclepious International at 800.295.0648 or visit their website at www.taris.cc...

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17213365 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Health: An alternative that worked for me

After years of irritable bowel syndrome, Ashley Franklin was at the end of his tether. Then he discovered applied kinesiology...

Ashley Franklin

INDEPENDENT
June 14, 2001

JOURNAL CODE: FIND LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 1402

#### (USE FORMAT 7 OR 9 FOR FULLTEXT)

... heard about applied kinesiology, through BBC Radio Derby.

A phone-in guest, Ian Reed, a **chiropractor** from Derby's Wellbeing Clinic, talked to listeners of how he had embraced applied kinesiology...

...be detected through the function of the muscles. It draws upon the principles of acupressure and the body's energy pathways to identify imbalances and correct them through manipulation and using a variety of alternative therapies.

Ian Reed explains: " Chiropractic philosophy is based around our nervous system, which either controls or influences movement, chemical reactions...

... Ian placed his hand on my outstretched arm, instructing me to push against him to test the muscle response. Each time a different food was dropped on my tongue, my arm stiffened.

So far...

... fruit pasta and potato, and with my arm stiffening up every time, I began to question where this was going. Is it any wonder? All my previous ailments had relied on... may be a parasitic infestation, a candida overgrowth, food intolerance, a chronic viral infection or psychological state. Once having found the cause, the rest is fairly easy to correct."

Ian Reed...

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15400232 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Scientific validity, effectiveness of therapy questionnaire debated JOANNE WOJCIK

BUSINESS INSURANCE, p3

January 29, 2001

JOURNAL CODE: WCBI LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 1337

(USE FORMAT 7 OR 9 FOR FULLTEXT)

Scientific validity, effectiveness of therapy questionnaire debated

LAGUNA HILLS, Calif.--A new program that systematically measures patients' progress in **psychotherapy** could improve the effectiveness and reduce the cost of mental health treatment, its promoters say.

But at least one independent **psychologist** is skeptical of the program's validity, saying that it needs to reviewed by experts...

the program, which was launched two years ago by Laguna Hills, Calif.-based PacifiCare Behavioral Health, a subsidiary of PacifiCare Health Systems Inc. The results have been gathered into a single database that is now being tapped to benchmark and improve treatment methods, according to psychologist Edward Jones, PacifiCare Behavioral Health's corporate clinical director.

By comparing information provided by both the patient and his or her **psychotherapist** to that contained in the database, the program can predict how a patient in treatment...

... recent telephone press conference. The program also has identified some undetected risks-such as suicidal patients and those with chemical dependency problems-that therapists missed, he said.

``What we found is that there is frequently a lack of congruence...

...Jones said.

The ``LSQ'' Mr. Jones referred .

to is an acronym for the `life status questionnaire,'' a form developed by PBH in conjunction with researchers at Brigham Young University in Salt Lake City. Its questions focus on the quality of the patient's family life, his or her moods and...

If there is a discrepancy between what the patient reports on the 30-item **questionnaire** and the diagnostic information provided by the therapist, a care manager from PBH alerts the...

... paper-and-pencil test, people will respond differently than they would in an in-person interview with a therapist.'' Typically, individuals are more likely to disclose sensitive personal information in writing...

...beginning of this year, after reviewing the ALERT program's results.

But Laguna Nigel, Calif., psychologist Marc Skelton, who serves as the chair of the division of clinical practice of the California Psychological Assn., questioned whether the approach really is scientific.

``Any effort to try to systematically review treatment is...

...reviewed by an impartial third party outside of managed care, '' he said.

Mr. Skelton also questioned the validity of the 30-item

questionnaire , contrasting it against the Minnesota Multiphasic

Personality Inventory, which is widely used to conduct psychological evaluations. The MMPI, he said, `is 567 items long and includes a validity scale.''

A validity scale is a method of determining whether a respondent is answering  ${\tt questions}$  truthfully. The MMPI asks the same  ${\tt question}$  in a variety of ways to see whether the responses are consistent, he said.

He also questioned whether the sampling of patients used as a benchmark in the ALERT database is a scientifically valid cross-section similar to that used in independent studies.

Furthermore, many people seeking **psychological** treatment are suffering great **psychological** distress, so ``their ability to accurately report what's going on is **questionable**,'' he said.

PBH's Mr. Jones explained how the ALERT program works by providing an example. ``A 28-year-old woman called for an authorization to see a therapist ,'' he said. ``At the first session, the patient does the initial LSQ, which is faxed to PacifiCare Behavioral Health and uploaded into the...

... signal suicide risk, Mr. Jones said. The highest score possible is 120 points, with each question given a weight of four points.

At the second session, the therapist completes a Provider...

#### ...Jones said.

This information is collected by the PBH care manager, who then calls the **therapist** to discuss the **patient** 's treatment plan. In this case, the patient was referred to a **psychiatrist**, who prescribed antidepressants.

At a subsequent session, after the medication had taken effect, the patient...

...So, we're seeing clear improvement,'' Mr. Jones said. ``At session five, she completes the **psychotherapy** but continues on the medication. Then, six months later, the LSQ is mailed to the...

#### ...a short time, '' he said.

The care managers, who are master's- and doctoral-level **psychologists** with clinical experience, also work with the treating therapists in a collegial way, ``to focus...

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12555116 (USE FORMAT 7 OR 9 FOR FULLTEXT)
The touch that heals
Roseann Gould
JERUSALEM POST
August 18, 2000
JOURNAL CODE: WJPT LANGUAGE: English RECOR

JOURNAL CODE: WJPT LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 1380

(USE FORMAT 7 OR 9 FOR FULLTEXT)

 $\dots$  to our topic of pre/post surgical massage and how it can assist in your healing process .

What are the benefits of both pre and post-surgical massage?

Pre-surgical massage creates an environment where the woman (or a man) can express fears and ask questions that s/he may have felt uncomfortable asking the doctor or possibly did not have time to get into a full discussion. The massage therapist can act as a liaison between patient and doctor and forward the patient's concerns to the doctor so that they can...

... surgical massage is also a place where the client can take personal responsibility for her healing process.

The positive, relaxed environment of the massage clinic allows the patient to express unspoken fears...

- ...start to talk or if I notice stress in their body I might ask a **question** that may encourage them to express fear, doubt, anger, sadness. I may also use guided...
- ... I also do some massage to promote comfort to the client. After the tissue has healed, I use techniques called skin rolling and plucking. These are methods that foster better circulation, drain lymph fluids... areas of my body. I am convinced the massage has contributed significantly to my post procedure healing."

K.S., Tel Aviv.

Roseann Gould has been in private practice for more than 25...

... offers a special membership program which includes discounts on complementary as well as conventional care, **psychological** counselling, couple and family therapy, counselling for eating disorders and **physical therapy** specifically geared for pelvic disorders. Membership also includes special discounts for lectures, workshops and Solgar...

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11470518 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Chiropractic Neurologists Managing Patients' Autism, Stroke, Other Disorders, According to Journal of the American Chiropractic Association (JACA)

PR NEWSWIRE

June 12, 2000

JOURNAL CODE: WPRW LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 1081

(USE FORMAT 7 OR 9 FOR FULLTEXT)

Chiropractic Neurologists Managing Patients' Autism, Stroke, Other Disorders, According to Journal of the American Chiropractic Association (JACA)

Preview Copy Available for Journalists

ARLINGTON, Va., June 12 /PRNewswire/ -- Chiropractic neurologists are gaining respect for their treatment of patients suffering from hyperactivity, attention deficit disorder...

An article in the June 2000 issue of the Journal of the American Chiropractic Association (JACA) reports on the growing specialty of chiropractic neurology and new research in the neurological sciences that points to chiropractic as a possible non-drug treatment for a host of baffling disorders.

"Chiropractic is neurology," says Dr. Gail Henry. "That's what we do -- affect the central nervous...

 $\dots$  muscle, a joint, out into the periphery, and into the central nervous  $\mbox{\sc system."}$ 

For example, **chiropractic** neurologists have successfully treated attention deficit disorders (ADD/ADHD) without drugs, according to the JACA ...

... the brain. Some respond well to music, but of course, the treatment is very individualized."

Chiropractic neurology is also addressing autism. "Many children may be autistic as a result of compromised cerebral and thalamic integration," explains Dr. Michael Hall. "A chiropractic neurologist may be able to provide additional clinical insight and clinical procedures to improve brain...

...to brain-based clinical disorders."

In keeping with its mission to treat the whole body, **chiropractic** neurology is also proving helpful in the management of injuries from whiplash accidents, traumatic brain...

...many other clinical disorders, according to the JACA article.

Currently, there are 525 board-certified **chiropractic** neurologists worldwide recognized by the American **Chiropractic** Association (ACA). The specialty has enjoyed an increased popularity over the past 15 years, according...

... Dr. Frederick Carrick, a distinguished post graduate professor of clinical neurology at Logan College of Chiropractic and president of the ACA Council on Neurology. "While neurology has always been the basis of chiropractic , advanced training in the discipline allows the practitioner to serve patients at a higher level."

In Other JACA Stories ...

Animal Chiropractic : Turf War Brewing Between Veterinarians and Chiropractors

As complementary and alternative medicine (CAM) continues to gain popularity, many pet owners are beginning...

 $\dots$  Dr. Edward L. Maurer in the June issue of JACA.

"More and more doctors of chiropractic are making 'farm and barn calls,'" Dr. Maurer writes in the article. "Invariably, it's...

... Maurer continues. "Frequently, these benefits have come only after exhausting the usual DVM treatment(s). Chiropractic, homeopathy, physical or massage therapy, acupuncture, and other forms of health care have demonstrated success...

# ...Pain, Looking for Answers

For millions of people who have been injured, gone through the healing process, but still find themselves aching with unexplained pain months or years later -- there may be...

... an article in the June JACA. New research being conducted by Dr. Geoffrey Bove, a chiropractor and full-time neurophysiology researcher at Beth Israel Deaconess Medical Center, will examine the causes...

...axons and pain in distant parts of the body does exist.

There is also the **question** of scar tissue, which forms following an injury and may be left intact when a...

... nearby nerves and axons by limiting their normal movements.

"There are a lot of unanswered questions about why what chiropractors are doing is working or not working," Dr. Bove says. "All this pain research is directly relevant to what chiropractors do."

For a copy of the June JACA, call the American Chiropractic Association at 800-986-4636.

/CONTACT: Teri Howell or Felicity Feather of the American Chiropractic Association, 800-986-4636/ 17:40 EDT

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01924056 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Yoga of healing: homoeopathy

HINDU

June 14, 1998

JOURNAL CODE: FHIN LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 2536

(USE FORMAT 7 OR 9 FOR FULLTEXT)

There are many systems of healing available today. Of them, homoeopathy, is very popular in India. One of the issues T...

... it is so. In conversation with Dr. A.U. Ramakrishnan, eminent homoeopath.

Excerpts from the interview :

- T. K. V. DESIKACHAR: There are many **systems** of **healing** available today. Homoeopathy, which you represent, is very popular in India. You are an eminent...
- ... of the picture before the other comes in. Actually they are complementary. There is no **question** of homoeopathy or any one system absolutely replacing another.

TKVD: Absolutely right. The focus must...

- ... the temperature, takes the blood pressure and sometimes recommends a blood test. Based on this **procedure** a diagnosis is made and **treatment** is given. If I were to come to you with a complaint how would you...
- $\dots$  even though homoeopathic medicine is harmless and will not have any adverse effect on the <code>patient</code> .

TKVD: When people come to a Yoga therapist, we look at the body, the emotional state of the person and the state of...principles wherein you are assessing the patient with one body of knowledge and using a system of cure that does not fit the same body a knowledge as the tools which you used...

...into the individual response of each patient to the environment. I would ask my patient questions like which side he prefers to sleep on in order to get good sleep. There...comprehending or analysing. In these patients homeopathy has a positive role to play because homeopathic medicines energise the patient's system even without the patient making any effort. In such cases, I...

...which are irrefutable and can be put to trial by anyone.

Dr. AR: One concluding question. Do you think that all homeopaths and practitioners of other systems of medicine should necessarily...

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Set
        Items
                 Description
                 PSYCHIAT? OR PSYCHOSOMAT? OR PSYCHOLOG? OR PHYSIC? () THERAP?
      1163336
S1
               OR PSYCHOTHERAP? OR PSYCHO() THERAP? OR CHIROPRACT? OR BIOFEE-
              DBACK? OR BIO() FEEDBACK?
S2
                 ENERG? (2N) (HEALTHCARE OR HEALTH() CARE OR MEDICIN?) OR NEUR-
              OMODULAT? OR NEURO()MODULAT? OR NMT OR ACUPRESS? OR ACU()PRES-
S3
      6161477
                 PATHWAY? OR PATH()(WAY OR WAYS) OR QUERIE? OR QUERY? OR QU-
              ESTION? OR INTERROGAT? OR INTERVIEW?
S4
                 (MUSCLE() RESPONSE) (5N) (TEST? OR RATE? ? OR RATING OR ASSES-
              S? OR APPRAIS? OR EVALUAT? OR MEASUR? OR DETERMIN? OR ESTIMAT?
               OR GAUG? OR DIAGNOS? OR MONITOR?) OR MRT
S5
                 (PATIENT? OR SUBJECT? ?) (10N) (PRACTITIONER? OR THERAPIST?)
S6
                 DNFT OR DIRECT() (NONFORCE OR NON() FORCE) () TECHNIQUE OR MUS-
         1355
              CLE()TEST? OR (ORING OR O()RING)()TEST? OR LEG()LENGTH()TEST?
              OR PHYSIC?()STIMULAT?
S7
                 (SEMANTIC? OR CLINIC?) (3N) ALGORITHM?
         1816
S8
            3
                 (CONCIOUS? OR SUBCONCIOUS?) () LEVEL?
S 9
                 (OPTIM? OR CORRECT?)(2N)(COMMAND()STATEMENT?) OR (VERBAL? -
              OR NONVERBAL?) () CORRECT? () COMMAND?
S10
       140035
                 DYSFUNCTION? OR AUTONOMIC?()(FUNCTION? OR RESPONSE?)
S11
      6727375
                 POSTUR? OR POSITION?
         2078
                 (PATHWAY? OR PATH()(WAY OR WAYS))(3N)(PERNICIOUS? OR SENSO-
S12
              RY? OR MOTOR? OR ALLERG? OR INFECT? OR EXOGENOUS? OR TOXIN? OR
               MORPHIC?)
                 METHOD? ?
S13
      2656581
S14
     16878174
                 SYSTEM? ?
S15
      7805594
                 PROCESS??
S16
      2935336
                 PROCEDURE? ?
S17
      2017983
                 TECHNIQUE? ?
S18
      4121455
                 TREAT?
S19
        60519
                 CURING
S20
        19627
                 CURATIV?
      7125189
S21
                 HEAL?
      1767474
$22
                 CORRECT???
       257701
S23
                 CURE
        47648
S24
                 CURES
S25
        84195
                 CURED
S26
       191023
                 REMEDY?
S27
       173156
                 REMEDIE?
       410915
S28
                 S1:S2 AND S3
S29
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                 S28 AND (S4 OR S6 OR S7 OR S8 OR S12)
S30
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S31
        60045
                 S29:S30
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                 S31 AND S4
S32
S33
                 S31 AND S3:S4(5N)S5
          422
          551
S34
                 S32:S33
S35
           23
                 S34 AND S10:S11(5N)S5
S36
          241
                 S34 AND S13:S17(5N)S1:S2
S37
          204
                 S36 AND S5
          342
                 S32 OR S35 OR S37
S38
                 S38 AND FEINBERG
S39
            0
          342
S40
                 S38:S39
S41
            2
                 S40 AND S3(5N)S4
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      98:General Sci Abs/Full-Text 1984-2004/Jun
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     15:ABI/Inform(R) 1971-2004/Jun 15
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      47: Gale Group Magazine DB(TM) 1959-2004/Jun 15
         (c) 2004 The Gale group
File
      80:TGG Aerospace/Def.Mkts(R) 1986-2004/Jun 16
         (c) 2004 The Gale Group
File 141:Readers Guide 1983-2004/Jun
         (c) 2004 The HW Wilson Co
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         (c) 2004 Newsweek, Inc.
File 484: Periodical Abs Plustext 1986-2004/Jun W1
         (c) 2004 ProQuest
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         (c) 2004 ProQuest Info&Learning
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         (c) 2004 The Gale Group
File 646: Consumer Reports 1982-2004/May
         (c) 2004 Consumer Union
File 609: Bridge World Markets 2000-2001/Oct 01
         (c) 2001 Bridge
File 649: Gale Group Newswire ASAP(TM) 2004/Jun 15
         (c) 2004 The Gale Group
File 610: Business Wire 1999-2004/Jun 16
         (c) 2004 Business Wire.
File 809:Bridge World Markets News 1989-1999/Dec 31
         (c) 1999 Bridge
File 810: Business Wire 1986-1999/Feb 28
         (c) 1999 Business Wire
File 813:PR Newswire 1987-1999/Apr 30
         (c) 1999 PR Newswire Association Inc
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45/3,K/2 (Item 2 from file: 16)
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09208920 Supplier Number: 79260969 (USE FORMAT 7 FOR FULLTEXT) Energy Therapies and Diabetes Mellitus.

Guthrie, Diana W.; Gamble, Maureen Diabetes Spectrum, v14, n3, p149

Summer, 2001

Language: English Record Type: Fulltext Document Type: Magazine/Journal; Professional

Word Count: 4967

- ... presence of a therapist, whether local or long distance, to support and aid in the **healing process**. The literature on diabetes and **healing** therapies is sparse, but there is potential for energy therapy to assist individuals with diabetes...
- ...focused on illness, whereas energetic healing focuses on the connection of mind, body, and spirit. **Energy medicine** may be useful as a complementary therapy and adjunct to standard allopathic medical approaches.

The...

...symptoms, from lowered cognitive function to irritability, depression, and lethargy are all indications of altered **energy** responses.

Energy medicine is any interpersonal, nonpharmacological intervention that brings about changes in heat, cold, congestion, circulation, or...

...therapies aid in restoring balance, health, and normalized blood glucose levels? Definitive answers to these **questions** are pending. But before reviewing the available research, let us first summarize the theories related...Chinese), "ki" (Japanese), or "prana" (Hindu).

In traditional Eastern medicine systems, meridians are the energy pathways or transportation systems that connect and integrate the whole body. The points along the meridian...

...extremely small ductile tubules of the body were found to follow the previously described meridian <code>pathways</code>. The use of infrared photography has also shown the existence of these <code>pathways</code>. (8) One can alter responses along these meridians through the use of acupuncture and <code>acupressure</code>, or by tapping, exercising, stretching, or massaging the meridians.

"Chakras" are found on the major...energy of the person. Shiatsu is a type of massage that works on the energetic pathways or acupuncture points and has been described in Traditional Chinese medicine as a useful tool...

- ...one study, Rusy and Weisman (25) noted that children experienced less pain when given a method of treatment involving massage combined with education, relaxation training, hypnosis through guided imagery, biofeedback, or acupuncture. The authors described these interventions as complementary to pharmacological pain management. In another...
- ...the electrical flow in the body through meridians and may be measured by electrical impedance. **Acupressure**, which uses the same acupuncture points, influences the same meridians through the use of manual...
- ...at the placement sites for the acupuncture needles. (33)

Other Energy Therapies

Microwave Resonance Therapy ( MRT ), a combination of Traditional Chinese medicine and biophysics, has been found useful in surgery, trauma

...addition to normalizing blood glucose levels, it is these authors' opinion that therapies such as MRT might be useful in altering the physiological imbalances that have occurred because of patients' hyperglycemic...behavioral therapist at MidAmerica Diabetes Associates, a professor emeritus in the departments of pediatrics and psychiatry at the University of Kansas School of Medicine, and an adjunct professor at the University...Touch International. Online. Available: www.healingtouch.net

(21.) Barnett L, Chambers M, Davidson 5: Reiki **Energy Medicine** Bringing Healing Touch Into Home, Hospital, and Hospice. Rochester, Vt., Healing Arts Press, 1996

(21...

...Therapy (\*) Definition

Massage Manipulation of body tissues to bring about increased circulation,

relaxation, and energy.

Acupressure The stimulation of various

points or meridians with the use of finger pressure.

Acupuncture The...

 $\dots$ of

natural healing through the interaction with a universal energy.

Therapeutic Touch A nurs:

A nursing-based technique for aiding relaxation and healing through the use of the hands (modulation of energy).

(\*)Note: These are but a few...

(Item 3 from file: 16) 45/3,K/3 DIALOG(R)File 16:Gale Group PROMT(R) (c) 2004 The Gale Group. All rts. reserv.

Supplier Number: 79260968 (USE FORMAT 7 FOR FULLTEXT) Complementary and Integrative Medicine: Emerging Therapies for Diabetes,

Payne, Cynthia

Diabetes Spectrum, v14, n3, p129

Summer, 2001

Language: English Record Type: Fulltext Document Type: Magazine/Journal; Professional

Word Count: 1803

research into five major domains of CAM: biological therapies, manipulative and body-based therapies, alternate systems of healing, mind-body medicine, and energy medicine (Table 2).

Because of the wealth of emerging information about the various CAM therapies, we...

...diabetes care. Our articles address vitamin/mineral therapies, energy therapies, and one of the alternate systems of healing : Chinese Medicine. Articles to be published in Part 2 (Diabetes Spectrum Vol. 19, No. 4...

...of benefits and safety exists, our authors have also included clinical guidelines. These may aid practitioners in responding to their patients questions or inappropriate uses of CAM practices.

In her update on vitamin and mineral dietary supplements...

...about Traditional Chinese medicine (TCM) and diabetes (p. 154) as one example of an alternative system of healing. She notes that TCM practitioners view the human body and its functioning from the perspective

....is also chair of the White House Commission on Complementary and Alternative Medicine Policy. (An interview with Dr. Gordon will be included in Part 2 of this research section.)

At a...innovator for most of her professional life. Currently employed as a diabetes educator with Innovex Health Management Systems, she was previously a senior nutritionist at the Joslin Diabetes Center affiliate and a clinical...

...www.nccam.nih.gov

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...of Pennsylvania

Cardiovascular disease Chiropractic

Craniofacial disorders

Neurological disorders Pediatrics...

University of Michigan Natural medicine and prevention Maharishi University of Management Palmer Center for Chiropractic Research, Iowa

> Kaiser Foundation Hospitals, Oregon

Oregon Health Sciences University

...Health

Sciences

Table 2. Domains of Complementary and Alternative Medicine Manipulative and body-based therapies

- \* Acupressure
- \* Alexander technique
- Chiropractic medicine
- \* Feldenkrais method
- \* Massage therapy
- \* Neuromuscular therapy
- \* Osteopathy
- \* Reflexology
- \* Rolfing

# Biological therapies

- \* Antioxidizing agents
- \* Cell treatment
- \* Changes in lifestyle
- \* Chelation treatment
- \* Diet
- \* Megavitamins
- \* Metabolic therapy
- \* Nutritional supplements

## Mind/body interventions

- \* Art therapy
- \* Biofeedback
- \* Dance therapy
- \* Humor
- \* Hypnotherapy
- \* Meditation
- \* Music therapy
- \* Prayer therapy
- \* Psychotherapy
- \* Relaxation
- \* Support groups
- \* Yoga

#### Alternate systems of medical practice

- \* Acupuncture
- \* Ayurveda
- \* Community-based practices
- \* Environmental medicine
- \* Homeopathy
- \* Native American medicine
- \* Naturopathic medicine
- \* Past life therapy
- \* Shamanism
- \* Tibetan medicine
- \* Traditional Oriental (Chinese) Medicine

# Energy medicine

- \* Blue light treatment and artificial lighting
- \* Electroacupuncture
- \* Electrostimulation and neuromagnetic stimulation
- \* Magnetic therapy
- \* Magnetoresonance spectroscopy...

45/3,K/20 (Item 4 from file: 149)
DIALOG(R)File 149:TGG Health&Wellness DB(SM)
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01899939 SUPPLIER NUMBER: 61523937 (USE FORMAT 7 OR 9 FOR FULL TEXT) Therapeutic Touch: A Healing Modality.

Mulloney, Steffanie S.; Wells-Federman, Carol Journal of Cardiovascular Nursing, 10, 3, 27 April,

1996

PUBLICATION FORMAT: Magazine/Journal ISSN: 0889-4655 LANGUAGE: English RECORD TYPE: Fulltext TARGET AUDIENCE: Professional

WORD COUNT: 12183 LINE COUNT: 01023

- ... of energy modulation during which the practitioner uses the hands as a focus to facilitate **healing**. The **technique** involves simultaneously centering awareness, directing compassionate intention, and modulating the flow of human energy using...
- ...derived from the Anglo-Saxon word haelan, which means to make or become whole. The healing process is the innate ability to integrate and balance body, mind, and spirit. Healing is described...
- ...Healing is not something the nurse does for the patient; rather, the nurse facilitates the **healing process** through knowledgeable caregiving. As Nightingale stated, "Nature alone cures ... and what nursing has to do
- ...upon him."(2(p133)) The nurse, through assessment, therapeutic intervention, and compassionate caregiving, facilitates the **healing** process .

 ${\tt Healing}\$  can become blocked in times of stress such as illness or hospitalization because of the...

- ...is triggered when a person perceives a situation to be a threat to physical or **psychological** well-being and that he or she is unable to cope effectively with the demand...
- ...pain, tension headaches, insomnia, and gastrointestinal complaints. With repeated or prolonged exposure to physical or **psychological** stress, this response can exacerbate symptoms of diseases that are influenced by central nervous system...
- ...anxiety, and interrupting the stress-symptom cycle through TT can enhance the body's natural **healing process**, facilitate recovery from illness or injury, promote health, and prevent further complications.

  THEORETICAL FRAMEWORK

  Krieger...
- ...This philosophy holds that a universal, unitary life force, or vitality, flows through all living systems. A healthy individual has an abundance of vitality and therefore can consciously sense and direct this energy with many other valuable therapies such as hundreds of medications, biofeedback, relaxation techniques, and therapeutic use of presence, the mechanism of action in TT is still unknown. However...
- ...different energy frequencies that are continually interacting. A human being is a complex, multidimensional energy system. From this point of view, health or wholeness implies an inner balance among these different

levels or dimensions of energy as...

...to center, no intention to assist the subject, no attuning to the condition of the **subject**, and no direction of energy. **Practitioners** are asked to count backward from 100 by sevens while moving the hands over the ...during the first two sessions, and the third session served as a control with the **practitioner** and **subject** sitting quietly for 20 minutes. Measures of physiologic and **psychologic** stress were collected before, during, and after each session. Physiologic measures included heart rate, skin temperature, blood pressure, and respiratory rate; **psychologic** measures used two visual analog scales, one each for state and trait anxiety.

Data analysis...

...20 to 28 minutes. Both the TT and mimic segments were performed from behind the **subject** by an independent TT **practitioner** (eight of the **subjects**) or by the first author (four of the subjects).

The impact of TT was assessed...confounded by some methodologic issues. The standardized practice of TT was altered in that the practitioners assessed and treated subjects from behind only. Second, the findings must be considered preliminary because this was an exploratory ...

...Gagne and Toye(34) investigated effects of TT on anxiety. Anxiety is an index of **psychologic** distress and considered incompatible with physical relaxation. These studies test whether TT can influence the subjective **psychologic** experience of anxiety. The strength of this segment of TT research is that it builds...

...through replication and extension. Populations include adult patients awaiting cardiac surgery, older medical patients, and psychiatric inpatients.

Heidt's(9) study of 90 hospitalized cardiovascular patients had three groups. One group...

...of TT and relaxation therapy on the anxiety of 31 inpatients at a Veterans Administration psychiatric facility. The study compared three groups that received two sessions within 24 hours of TT, relaxation therapy (RT) as described by Benson, (5) or mimic TT with psychiatric inpatients suffering moderate to severe anxiety. ...treatment outcome. An attempt was made to analyze expectancy effects with the use of a questionnaire labeled "Final Summary." However, expectancy did not correlate with outcome. This result created statistical problems...

...treatment than the other groups, suggesting that the groups were not comparable on this variable.

Questions arise around the methodology used in this study. Specifically, the significant differences in treatment length...

...appears at least as effective as RT as a clinical strategy for anxiety reduction in <code>psychiatric</code> inpatients. TT are tested in a new population, which represents an extension of previous research. Gagne and Toye(34) noted that many methods of anxiety reduction were ineffective in <code>psychiatric</code> inpatients. Passive anxiety reduction <code>techniques</code> such as TT were valuable for many of these patients whose degree of anxiety interferes

 $\dots$ 5-minute mimic TT treatment; both treatments were administered by Keller.

The McGill-Melzack Pain Questionnaire , (39) a subjective instrument

that evaluates the experience of pain, was given before, 5 minutes...an experienced practitioner or a control group in which no treatment was given and the **subject** merely sat for 5 minutes. The TT **practitioner** was hidden behind a specially modified door. **Subjects** in both groups placed their wounded arms through an opening in this modified door. Once...

- ...these findings was in the administration of TT only to the subject's arm. This **treatment** varied substantially from the standardized **method** described by Krieger(15). Missing from Wirth's discussion41 of his research were a detailed...
- ...expectation of healing that most often confounds healing research. This elimination was accomplished by isolating **subjects** from the TT **practitioner**, blinding them to the nature of the intervention during the study, and using an independent...
- ...compared with those in the control group. The observations of four physicians blind to the **procedure** showed that the **treated** subjects experienced a significant acceleration in the rate of wound healing compared with the control subjects (P (is less than) 0.005). Again the method used varied from standard TT **procedure** in that patients were **treated** behind a one-way mirror. The ...is correct, the practice of TT should enhance or support the immune system of the **practitioner**.

Recently bereaved **subjects** were selected for this study because bereavement is known to temporarily depress immune function. The...

 $\dots$  expected to respond favorably to TT treatment because it is assumed to accelerate the natural <code>healing process</code> .

Practitioners had been trained by Krieger and Kunz and had practiced the modality for more than 5 years. Unlike other TT research where practitioners were only allowed to treat control and experimental subjects for 5 minutes, practitioners in this descriptive study were allowed to administer treatments for the length of time that...

- $\ldots$ study of the phenomenon as practiced clinically rather than adherence to a specific protocol.
- All subjects (practitioners and recipients) completed questionnaires designed to measure baseline anxiety and affect. Blood was drawn for baseline immunologic analysis. These...
- ...what the impact of the response is in terms of the rest of the immune system and health status will need to be investigated in future research. One potential hypothesis derived from this...
- ...reduce anxiety in hospitalized cardiovascular patients, institutionalized older patients, people exposed to natural disasters, and **psychiatric** inpatients. TT may reduce autonomic and central nervous system arousal and the pain of tension...
- ...Heidt(46) explored the lived experience of TT from the perspective of seven pairs of practitioners and patients. Data were collected from interviews before and after TT treatments and from continuous notes that were made of all verbal...
- ...a sense of inner, calm to the patient, the patients relaxed and focused on the healing process. Heidt's investigation of the lived experience of TT lays the groundwork for future exploration...explored the lived experience of TT from the recipient's perspective. Data were obtained by interviewing 20 volunteer subjects with varied diagnoses that included depression, osteoarthritis, multiple sclerosis, cancer, and acquired immune deficiency syndrome. Each participant was interviewed twice, the first

being an open-ended interview and the second interview serving to clarify information from the first.

The data were subject to content analysis using...

- ...s lived experience of the TT process. Data were collected from a series of videotaped interviews , drawings by 11 children, and the diaries of parents and the investigator. Each child drew...
- ...for research and may best be approached through an interdisciplinary effort. Other professionals researching subtle energy and energy medicine are striving to articulate and test a comprehensive paradigm that can account for the phenomena...for further evaluation.(79) Also, caution is advised in administering TT to patients who have psychiatric disorders or who have been physically abused. These patients are extremely sensitive to human interaction...
- ...this process "living the Therapeutic Touch" in her book by that title and describes the **process** that occurs when commitment to **healing** becomes a lifestyle. Nurses report experiencing increased vigor, confidence, commitment, and satisfaction with their work...
  ...Meehan(80) asserts that the simple form of meditation that informs TT practice promotes a **process** of self- **healing** in the nurse. This self-healing is congruent with Newman's(83) framework, in which...
- ...equivalent to health and healing. Future research investigating the psychophysiologic effects of TT on the <code>healer</code> will help elucidate this <code>process</code> of self- <code>healing</code> .

GUIDELINES FOR PRACTICE

For more than 20 years, there has been a growing body of...

- ...reflecting the interest and growing acceptance of it as a nursing intervention. TT policy and procedure guidelines for health professionals are published by Nurse Healers-Professional Associates, Inc.(NH-PA), the professional association that...
- ...Recorded data can include objective changes and patient comments and should be recorded in the **patient** 's chart and the personal journal of the **practitioner** . A journal of TT experiences is a valuable tool for skill development.

Recommendations for practice...

- ...in medical schools or used in hospitals in the United States. These practices include acupuncture, chiropractic, massage therapy, and homeopathy. Thirty-four percent of their sample of 1,539 adults used...of professional nursing. For many nurses, .TT embodies the spirit of nursing practice, but others question its effectiveness. (91-93) Both quantitative and qualitative research must continue to build a scientific...
- ...most important challenges will be to create a healing environment for each patient within the <code>health</code> care <code>system</code>. Therapeutic touch is one nursing intervention that has been shown to provide nurses with a...
- ...Treatment is the least structured phase as it is determined by the needs of the patient . During this phase, practitioners use hands both on and off the body to facilitate energy flow. Imagery often helps...
- ...a directory of TT practitioners throughout the world.

  International Society for the Study of Subtle Energies & Energy
  Medicine 356 Coldco Circle Golden, CO 80403 (303)278-2228

  Pumpkin Hollow Farm 1184 Route 11...apneas during meditation. Am J

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              OR PSYCHOTHERAP? OR PSYCHO() THERAP? OR CHIROPRACT? OR BIOFEE-
             DBACK? OR BIO() FEEDBACK?
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             S? OR APPRAIS? OR EVALUAT? OR MEASUR? OR DETERMIN? OR ESTIMAT?
              OR GAUG? OR DIAGNOS? OR MONITOR?) OR MRT
                 (PATIENT? OR SUBJECT? ?) (10N) (PRACTITIONER? OR THERAPIST?)
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             OR PHYSIC?()STIMULAT?
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                 (SEMANTIC? OR CLINIC?) (3N) ALGORITHM?
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                 (CONCIOUS? OR SUBCONCIOUS?) () LEVEL?
S9
                 (OPTIM? OR CORRECT?)(2N)(COMMAND()STATEMENT?) OR (VERBAL? -
             OR NONVERBAL?) () CORRECT? () COMMAND?
S10
       715742
                 DYSFUNCTION? OR AUTONOMIC?()(FUNCTION? OR RESPONSE?)
S11
      2513697
                 POSTUR? OR POSITION?
S12
        24446
                 (PATHWAY? OR PATH()(WAY OR WAYS))(3N)(PERNICIOUS? OR SENSO-
             RY? OR MOTOR? OR ALLERG? OR INFECT? OR EXOGENOUS? OR TOXIN? OR
              MORPHIC?)
S13
     18392733
                METHOD? ?
S14
     27254484
                SYSTEM? ?
S15
      8718082
                PROCESS??
S16
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S19
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                S18 AND S4
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                S19 AND S6:S9
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                S19 AND S10:S12
S23
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                S19 AND S13:S17
                $18 AND S1:S2(5N)(TREAT? OR CURE? ? OR CURING OR CURATIV? -
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       113879
             OR REMED? OR HEAL? OR CORRECT?)
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             OR HEAL? OR CORRECT?) (5N) (S13:S17 OR S5)
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                S25 AND (S4 OR S6:S9 OR S12)
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                S19:S23 OR S26
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                S27 AND PY<2004
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29/3,K/21
              (Item 5 from file: 73)
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07022308
  Alcohol and substance use disorders: Algorithms and critical pathways
for healthcare delivery
 Miller T.W.; Suchinsky R.; Leukefeld C.; Kraus R.E.
  Dr. T.W. Miller, 435 Wells Hall, Murray State University, Murray, KY
  42071 United States
  Journal of Contemporary Psychotherapy ( J. CONTEMP. PSYCHOTHER. ) (United
  States)
           1997, 27/3 (189-200)
  CODEN: JCPTB
                 ISSN: 0022-0116
  DOCUMENT TYPE: Journal; Review
  LANGUAGE: ENGLISH
                      SUMMARY LANGUAGE: ENGLISH
  NUMBER OF REFERENCES: 21
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# Alcohol and substance use disorders: Algorithms and critical pathways for healthcare delivery

...as well as by the availability of enhanced models of service delivery. Providers are using clinical algorithms and critical pathways to standardize clinical care and improve clinical services to patients. The article highlights the application...

...clinical models and demonstrates their utility in the context of substance use and abuse disorders. Clinical algorithms and critical pathways are advanced as guidelines in diagnostic and therapeutic processes for the delivery of quality health care to patients. Specific recommendations for the development and implementation of such initiatives are discussed...

MEDICAL DESCRIPTORS:

algorithm; health care delivery; model; patient care; practice guideline; psychiatric diagnosis; review; substance abuse SECTION HEADINGS:

032 Psychiatry

036 **Health** Policy, Economics and Management 1997

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29/3,K/70
            (Item 46 from file: 11)
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0001850726 2002-01273-000
Creative energies: Integrative energy psychotherapy for self-expression
  and healing .
SERIES TITLE: The Norton energy psychology series.
AUTHOR: Hover-Kramer, Dorothea
, xxii, 217, 2002
PUBLISHER: W. W. Norton & Co, Inc-New York-NY--US
Creative energies: Integrative energy psychotherapy for self-expression
  and healing .
SERIES TITLE: The Norton energy psychology series.
... ABSTRACT: Energy psychology comprises a family of methods for
 balancing the human vibrational matrix, which in turn contains...
...the counseling endeavor. This book describes the integration of the
 biofield, energy centers, and meridian pathways and their relevance to
  emotional healing and increased creativity. The book explores the role of
 the helping professional using an integrative, comprehensive energy
 psychology and seeks to enhance the professional's ability to see his or
 her interactions with...
...DESCRIPTORS: Eclectic Psychotherapy; *...
... Psychotherapeutic Techniques...; Psychotherapists;
IDENTIFIERS: energy psychology ; ...
...integrative energy psychotherapy; ...
...meridian pathways
TABLE OF CONTENTS:
... Research supporting biofield, chakra, and meridian interventions for
   counseling
The scientific basis for energy-oriented psychotherapy
II: The human vibrational matrix
 The human biofield
 The chakras and their psychological meaning
 The meridians and related acupoints
Assessment of patterns in the human vibrational matrix
III: Integrative energy psychology interventions for emotional relief
 Ethical considerations for integrated energy psychotherapy
 Relieving pervasive psychoenergetic disturbance
Addressing psychoenergetic reversals
Treatment applications for working with specific emotional issues
IV: Integrative energy psychology interventions for accessing creativity
 Expanding our view of energy psychotherapy
 Releasing limiting beliefs and installing desired beliefs
 Becoming a life-artist
 Future directions for creative energies
References
Glossary
Bibliography of selected readings
Appendices
 Sample intake sheet
 Sample treatment consent for use of energy psychotherapy approaches
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Standards of practice in comprehensive energy psychology
Code of ethics for practitioners of comprehensive energy psychology
Organizational resources for further information
Beyond ground zero: Energy concepts for addressing shock, after-effects...

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29/3,K/84 (Item 60 from file: 11) DIALOG(R) File 11: PsycINFO(R) (c) 2004 Amer. Psychological Assn. All rts. reserv. 0001729949 2000-07467-000 Energy diagnostic and treatment methods . AUTHOR: Gallo, Fred P. , xx, 233, 2000 -PUBLISHER: W. W. Norton & Co, Inc--New York--NY--US

Energy diagnostic and treatment methods .

... ABSTRACT: This book describes a diagnostic system based on the practice of energy psychology: the application of diagnostic and treatment methods that are rooted in an energy paradigm. Through a variety of protocols this book guides psychotherapists in diagnosing and treating psychological problems using manual muscle testing and various kinesiological treatments. The author discusses theory, rationale and practice throughout the book. Suggestions and implications for the future of energy psychology are included. (PsycINFO Database Record (c) 2003 APA, all rights reserved)

...DESCRIPTORS: Physical Therapy ; \* ...

... Psychotherapy

IDENTIFIERS: diagnosis & treatment of psychological disorders in energy psychology

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#### NeuroModulation Technique

#### Introducing Rationality to the World of Energetic Medicine

What is NeuroModulation Technique?

that someone has found something that works; but doesn't After all, sometimes we find in the world of medical education out what it was that worked about them, and what was nonsense decision to suspend disbelief and learn the methods, and to find reflex points. In studying these early techniques I made the the use of radionically charged vials, and seemingly arbitrary many doctors away from these methods is that they are based on musculoskeletal conditions. One glaring problem that has kept earlier methods to the more recent of these methods such as JMT results; but the results were inconsistent, improving from the and many others. We have known that these methods produced energetic techniques such as TBM, NAET, NET, JMT, BEST, exposed to. It is the product of 20 years of study of all the various system of healing that will enable the doctor to treat conditions neurophysiological models. NeuroModulation Technique is a the world of health care. It is based upon widely accepted the autonomic system responsible for many diseases and well out of the reach of methods we have traditionally been NeuroModulation Technique is a method of healing unique in all The goal of these methods has been to correct faulty function in

understand why it works. Some techniques have started this way and the originators have simply imagined their way to a whole complex of unsupportable and arbitrary procedures to teach.

# Why Does the World of Alternative Medicine Need NMT?

techniques that utilize those vials. The results those methods irrelevant to NMT treatment, and even to the types of energetic even if the vials were capable of doing this, that they are digital video presentations of experiments in our offices that a.) devices we are marketed are unnecessary? We will show with vials and Radio Shack part assembled diagnostic and therapeutic doctors. Can you prove otherwise? Why take the risk when the regulatory agencies that would love to persecute alternative nothing more than water, we are exposed in a very real way to attacked. We in alternative care should be prepared for that. If we transmit energetic signals through their skin, but the vials are think we are treating patients with energetically charged vials that business away from big business without expecting to be exhibiting a sharp increase in utilization from 1990 when visits to visits to alternative doctors surpassed those to MD's in 1997 of the Division for Research & Education in Complementary & These vials do not transmit such data to the patient, and b.) That that gap is even wider, and it is still growing. You can't take big alternative practitioners were far fewer than those to MD's. Now Medical School, and authority on alternative medicine in health care system. I spoke with David Eisenberg, M.D., Director 2001 when he was in Portland, OR. He told me the number of Integrative Medical Therapies Harvard Osher Institute, Harvard Alternative medicine is no longer the redheaded stepchild of the

achieve is not because of the vials. I want to treat with methods grounded in science, but without giving up the kind of care that restores the body's innate health in a natural way. NMT permits the doctor to do this with efficacy never before available. NMT affords the ability to practice energetic medicine without risking ones professional license, or livelyhood. I want to be able to hold my head high and tell my story with pride when someone asks me what I do and how it works. NMT empowers me to do that.

### How Was NeuroModulation Technique Developed?

reprogramming and debugging scripts. The NMT method is based performance of autonomic function with specific semantic to access, assess the autonomic nervous system, and modulate the is the computer. We use a unique form of muscle response testing proposition that the closest analogy to the human nervous system reflex points, or potions used. We approach very literally the accepted neurophysiological models. There are no vials, special patterns, and other sensory stimuli. It is based upon widely other stimulation of vertebral segments, specific breathing and/or non- verbal corrective commands and statements. This autonomic system is modulated with a combination of verbal semantic questions and statements. Performance of that muscle response testing utilizing verbal and/or non-verba assessing the autonomic control system of the patient through of health care treatment based upon a method of accessing and process is further augmented and reinforced with percussive, or tapping into. NeuroModulation Technique is a proprietary system previous energetic methods were inadvertently and tangentially In developing NMT I had an insight into what it was that these

on generally recognized principles of neurophysiology, physiology, psychology, linguistics, and anatomy and constitutes a unique and proprietary system of health care protected by applicable laws of United States patent, copyright, and trademark laws.

## What Can be Treated with NeuroModulation Technique

of normal function. NMT will change the way you look at illness system has simply been accessed and modulated in the direction weeks of therapy and rest. The patient's autonomic nervous completely and profoundly as if the patient had been through snow in the afternoon sun, and range of motion releases as and neurologic signs and tests take on a whole new meaning way of looking at the patient's condition. Even classic orthopedic disturbances. With NMT you will find that you have a whole new emotional, psychological and sensory/motor neurologic acute and chronic musculoskeletal conditions; addictions, For many conditions illness now becomes a problem of data not been manipulated, or subjected to any form of physical when you see these tests turn from positive at first examination of demylenating diseases; Crohn's disease, IBS, and gastric reflux system. This list includes all allergies, chronic degenerative therapy. Pain disappears instantly, spasm melts like a dusting of the patient to negative at the end of treatment - yet the patient has disease; infectious disease processes; all autoimmune diseases; diseases such as all forms of arthritis; multiple sclerosis and other provoked by faults in the function of the autonomic nervous profound results in virtually all forms of illness which are NeuroModulation Technique produces instantaneous and

processing of the biocomputer. It is now subject to real time correction as you use NMT to reprogram and debug that biocomputer just as literally as you might the computer that sits on you desktop.

Our seminars will contain many video segments that track the treatment of real patients from initial presentation through the conclusion of treatment for all of the conditions discussed above. NMT seminars will devote considerable time and attention to workshopping the technique. Practitioners will leave the seminar with the confidence and the competence to use this powerful work immediately on return to their practices. We won't just talk about what NMT can do; we will show you. We will walk you through this work until you are comfortable using it, and we will revolutionize and revitalize your practice in the process. You will become the doctor that patients can't wait to tell their friends and family about.

NMT truly is a revolution in health care and you have the opportunity to be among the first to be presented with this work. Our seminars are filling rapidly with DCs, DOs, L.Ac.s, MDs, OMDs, RNs, RPTs, DDSs, DMDs, psychotherapists, and NDs from all over the United States, Canada, and Europe. Please schedule early to insure a place. You won't be disappointed.

I hope to see you all at one of our upcoming seminars

Leslie S. Feinberg, D.C.
NeuroModulation Technique Founder